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Listing first 177 summaries
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ALIGNMENTS

Human; secreted and transmembrane protein; PRO; gene; ss;
Tumour necrosis factor alpha release; TNP-alpha release;
Jucose uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inihibitor; cytokine release stimulator; tumour;
liver tumour; breast tumour; prostate tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker. Novel human secreted and transmembrane protein PRO337 cDNA. BP. ADB38667 standard; cDNA; 1679 98WO-US024855. 98WO-US025108. 99WO-US005028. 99WO-US005190. 99WO-US008615. 98WO-US019330. 98WO-US019437. 98WO-US021141. 99WO-US023089. 99WO-US028214. 99WO-US028313. 99WO-US028409. 99WO-US028301. 99WO-US028634. 99WO-US020944 99WO-US021090 30-MAY-2002; 2002US-00158782 99WO-US012252 99WO-US020111 99WO-US020594 99WO-US021547 (first entry) US2003082766-A1. 07-OCT-1998; 29-OCT-1998; 29-OCT-1998; 20-NOV-1998; 01-DEC-1998; 05-JAN-1999; 08-SEP-1999; 13-SEP-1999; 15-SEP-1999; 15-SEP-1999; 05-OCT-1999; 29-NOV-1999; Homo sapiens 04-DEC-2003 01-MAY-2003. 10-MAR-1999; 01-SEP-1999 01-DEC-1999 02-DEC-1999 02-JUN-1999 30-NOV-1999 ADB38667; RESULT 1 ADB38667 3



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2001WO-US017092.
2001US-00872035.
2001WO-US017800.
2001US-00874503.
2001US-00886342.
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2001WO-US021066.
2001WO-US021735.
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19-DEC-2001; 2001US-00028072.
           18-FEB-2000;
22-FEB-2000;
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01-MAR-2000;
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(GETH) GENENTECH INC.

Deforge L, Desnoyers L, Filvaroff E, Gao A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Beresini M, ME, Goddard A Stewart TA, T Baker KP, Gerritsen Smith V,

WPI; 2003-786921/74. P-PSDB; ADB38668.

New secreted and transmembrane PRO polypeptides and nucleic acids, useful in gene therapy, detecting the presence of tumor in a mammal, or modulating the uptake of glucose or free fatty acid by skeletal muscle cells or adipocyte cells.

Claim 2; Fig 375; 660pp; English

541

The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of INF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of condrocyte cells, for stimulating the proliferation of inner ear uritular supporting cells, for stimulating the proliferation of finner ear uritular supporting cells, for stimulating the proliferation of finner ear uritular supporting cells, for stimulating the proliferation of finner ear uritular supporting cells, for stimulating proliferation of finner ear uritular supporting cells, for stimulating proliferation of adipocyte cells, for stimulating proliferation of an inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endochelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, cells, for stimulating proliferation of endochelial cells, for detecting the prosess of a sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding increarcion. A polymucleotide (II) encoding (I) is useful in chromosome proparation of PRO puppetide, for generating transgenic animals or knockout animals which in turn are useful in the development and chromosome identification, as chromosome marker, and for generating cornomosome identification, as chromosome marker, and for generating sequence or attimated sources. (I) and (II) are useful in diagnostic assays for PRO, ergonomosome in a secreted and transmembrane PRO polypeptide. 420 420 480 600 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGGCGCCACCCTCAG Grecactarreacaaccecercacceeresceresceresceraaccecaccaccarcerea TGCTGGGAATGACAAGTGGTGCTCGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAAAC 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAATGCACAATTCTATCTCTTGGGCAAT CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCCACCTCAG GIGCACIAITGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCTTA GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GGTGCAGACAGACACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC CTTCACGGGGCTGCTCTCTGTCTCTTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC CITCACGGGGCTGGCTGCTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAAGAAGTGC TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC egrecadadadadaccaccadadaccrcradegrecaccrcarrerecadadadada GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC Gaps . 0 Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Н 121 181 181 241 241 301 301 361 421 121 181 481 361 8888888888888888888888888888888 d à 8 g à В $\stackrel{\diamond}{\circ}$ 음 장 셤 중 원 8 8

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PJ;
Wood WI;
                                                                                Human, secreted and transmembrane protein, PRO, gene, ss, cytostatic, vulnerary; antiarthritic; pericyte cell proliferation, pericyte cell differentiation, chondrocyte cell differentiation, chondrocyte cell differentiation; tumour necrosis factor alpha release (TNF)-alpha release; dermal fibroblast cell proliferation, dermal fibroblast cell differentiation inhibitor; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; gene mapping; gene mapping;
                                                                                                                                                                                                                                                                                                                                                                                                        New isolated PRO polypeptide useful for tissue typing, gene therapy, a molecular weight markers in protein electrophoresis, and for treating arthritis and tumors.
                                                                                                                                                                                                                                                                                                                                            Gerritsen ME, Goddard A, Godowski E
Smith V, Stephan JF, Watanabe CK,
                                                               Novel human secreted and transmembrane protein PRO337 cDNA
 BP.
ADB78344 standard; cDNA; 1679
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29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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                                          (first entry)
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Grimaldi JC,
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                                          04-DEC-2003
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                    ADB78344;
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The invention describes an isolated PRO (secreted and transmembrane)

polypeptide (I). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are

useful for stimulating the proliferation of or gene expression in

pericyte cells. PRO357, PRO229, PRO1272 or PRO4405 polypeptide are useful

cells. PRO311, PRO357, PRO125, PRO1272 or PRO4405 polypeptide are useful

cells. PRO312, PRO357, PRO125, PRO1180, PRO1419 polypeptide

cells. PRO313, PRO526, PRO912, PRO1805, PRO19149, PRO1419, PRO214,

PRO1478, PRO131, PRO526, PRO3157, PRO1805, PRO1806, PRO1419, PRO1419,

PRO1478, PRO131, PRO126, PRO1806, PRO1919, PRO1411, PRO1412,

PRO1478, PRO1319, PRO1186, PRO1186, PRO1373, PRO1979, PRO1419, PRO1318,

PRO136, PRO1376, PRO1377, PRO1409, PRO1474, PRO1379, PRO1412,

PRO186, PRO1376, PRO1367, PRO1409, PRO1474, PRO1917, PRO1444, PRO4322,

CR PRO1887, PRO1928, PRO4341, PRO1409, PRO1474, PRO1917, PRO1460, PRO186, PRO9836 or PRO10096 polypeptide are useful for stimulating the proliferation of normal human dermal fibroblasts cells.

CR PRO181, PRO5229, PRO7184, PRO4415, PRO1742, PRO4488, PRO4408,

CR PRO1828, PRO5729, PRO7184, PRO4415, PRO1747, PRO4481, PRO4412, PRO5723, PRO5723, PRO5724, PRO44184, PRO4322, CR PRO5723, PRO5724, PRO44184, PRO4322, CR PRO5723, PRO5724, PRO44184, PRO4432, PRO44184, PRO44184

Claim 2; Fig 125; 308pp; English.

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841 ACAAAAGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA

CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTTATGGGAACTACCCTTGCGT GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT

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CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGAGGGGTGAAAGTGGAAAACAGACCTTT

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GGCCTCCAACAAGATGCCAACAATGCCAGGCATGCTATTTGGTCCAGGCGCCGT

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CAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGCGTCTGGCTGCTGCTTCT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGGCCACTTCCCCACCGGGGAAGGCT

CAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGTCTGGCTGCTGCTGCTTCTTCT

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is indicative of the presence of tumour in the mammal. The tumour is lung tumour, colon tumour, breast tumour, prostate tumour, rectal tumour or tumour. (1) is useful as molecular weight markers, for tissue typing, or as therapeutic agents. A polymucleotide (II) encoding (I) is useful for chromosome and gene mapping or gene therapy. (II) is useful for generating transgenic animals or knock-out animals which are useful screening useful reagents. PRO357, PRO229, PRO1272 or PRO4405 polypeptide is useful for treating bone and/or cartilage disorders (e.g., arthritis, sport injuries). This sequence encodes a human secreted and transmembrane
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100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                     Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
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1201 GCCGCCACCACCACCACCACCACACAGCAACACCACCAACAA	Db 1201 GCGGCCACCACCACCACCACACACAGCAACACGACGACAGCAACCAACCAACAGTA 1260 Qy 1261 TATACAAATGAAATTAGAAGAACAACAGCCTCATGGGACAGAAATTTGAGGGAGG	Db 1261 TATACAAATTAGAAGACACAGCCTCATGGGACAGAATTTGAGGGAGG	1321 AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA	Qy 1381 TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGAAGAACAAGCACCACCCGGTTGGA 1440	OY 1441 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCGCGAGGGCAAGGCTCAGCCTC 1500 Db 1441 CCCACTGCAAGCTGCAACGTGCAACCTCTTTGGTGCGGCAAGGGCAAGGGCTCAGCTC 1500	QY 1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560 Db 1501 TCTGCCCCACGAGTGCCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560	QY 1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGGGTGGGGCTGCGGGCACTTTG 1620 Db 1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGGGCTGCGGGCACTTTG 1620	Qy 1621 GTAGACTGTGCCACCGGGGTGTGTTGTGAAAACGTGAAATAAAAAGAGGAAAAAAA 1679 	RESULT 3 ADB38115 ID ADB38115 standard; CDNA; 1679 BP.	AC ADB38115; XX DT 04-DEC-2003 (first entry)	Novel human secreted and transmembrane protein F Human; secreted and transmembrane protein; PRO;	KW Tumour necrosis factor alpha release; TNF-alpha release; KW glucose uptake modulator; FFA uptake modulator; KW cell proliferation stimulator; cell differentiation stimulator; KW cell differentiation inhibitor; cytokine release stimulator; tumour;
il aatctatcaggaaagaaagaaagaaaaaaaaaaccgaacctgacaaaaaagagagaaaagaaaag 120 11 aagaaaaaaaatcatgaaaaccatccagccaaaaatgcacaattctatctcttggggcaat 180	GGGCAAT	CTTCACGGGGCTGGTCTGTGTCTCTCCAGGAGTGCCCGTGCGCAGGGAAATGC 240 	CACCTTCCCCAAAGCTATGGACAACGTGACGGCAGGGGAGGGGGAGGGCGCCACCTCAG 300 	GIGGACTATIGACAACCGGGIGACCCGGGIGGCCTGAACCGCAGCACCATCCTCTA 360 	CCCAAAC			GGTGCAGACAGACAACCACCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 540 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGAACAATATTAGCCTCAC 600 [CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCCAAGG 660 	GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGCATCACCCGGGAGCAGTC 720 	AGGGACTACGAGTGCAGTGCCTCCCAATGACGTGGCCCGGTGGTACGGAGAGTAAA 780 	GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTGACAGGTGTCCCCGTGGG 840

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19-APR-2002; 2002US-00125921 New

cervical tumour; liver tumour; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker. US2003087347-A1. Homo sapiens. 08-MAY-2003

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17-AUG-1998; 98US-0096791P. 02-UUN-1999; 99WG-US012252. 25-AUG-1999; 99US-00380137. 01-DEC-2000; 2000WG-US008439. 01-DEC-2000; 2000WG-US032678.

(GETH) GENENTECH INC

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ž Deforge L, Desnoyers L, Filvaroff E, Gao A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Baker KP, Beresini M, De Gerritsen ME, Goddard A, Smith V, Stewart TA, Tum

WPI; 2003-786938/74. P-PSDB; ADB38116. PRO nucleic acid, useful for preparing a recombinant PRO polypeptide for manufacturing a medicament for diagnosing or treating tumor.

Claim 2; Fig 375; 637pp; English.

The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the creams of TYF-alpha from human blood, for modulating the uptake of glucose of FRA by skeletal musche cells or adipocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of flacer cells, for inhibiting the binding of A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endotholial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, certal, cervical or liver tumour is lung, colon, breast, cervical or liver tumour is lung, colon, breast, certal, cervical or liver tumour is lung, colon, breast, cervical or liver tumour is lung, colon, breast, certal, cervical or liver tumour is lung, colon, breast, cervical or liver tumour is lung, colon, breast, cervical or liver tumour. The oligomiclectide probes are useful for isolating genomic and cDNA nuclectide sequences or in assays to identify other proceins or molecules involved in binding increaction. A polymerolectide (II) is encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the conformation of encoding transgenic animals which in turn are useful in diagnostic assays for pRO, e.g. detecting its expression in specific cells, itssues or serum, and for chromosome denting the expression in specific cells, itssues or serum, and for sources. (I) and (II) are useful for tissue typing. This equence encodes a novel human secreted and transmembrane PRO polypeptide.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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.; 0 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0; st Local Similarity 100. tches 1679; Conservative

GITGICCTICAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC

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540 240 240 300 300 360 360 420 420 480 480 540 009 600 999 660 720 720 780 780 840 840 900 181 CTTCACGGGGCTGGCTGCTGTGTCTCTCCAAGAAGTGCCCGTGCGCAGCAGGAGTGC 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 361 IGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC CACCTICCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA GGTGCAGACAGCCACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 481 GGTGCAGACAGACAACCCCAAAGACCTCTAGAGGTCCACCTCATTGTGCAAGTATCTCC 601 CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCCAAAGC 661 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 661 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGGAGTC 781 GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 841 ACABABGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 901 CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGAAAACAGACCTTT GGCCTCCAACAAGGTGGGCCACAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT TECTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCAAAAC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCCCCAAAGC 721 AGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCCGTGGG 841 ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGAAAACAGACCTTT GGCCTCCAACAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCGT CAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCTGCTGCTGCTCTTCT 181 901 1021 1081 1141 121 241 301 301 361 421 481 601 781 1021 121

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1440 1500 1560 1620 1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGCCACTTTG 1620 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAAGGGCTCAGCCTC 1500 GCCGCCACCACCACCACCAACACACAACAGCAATGGCAACACCGACAGCAATCAGATA 1260 GTAGACTGTGCCACCACGGCGTGTGTTGTGAAACGTGAAATAAAAAAGAGCAAAAAAA 1679 CCCACTGCAAGCTGCATCGTGCAACTCTTTGGTGCCAGTGTGGGCAAGGCTCCAGCCTC 1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTG TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA TTTAGGTACAATGGAGTTTTCCTTTTCCCAAACGGGAAGAACAAGCACACCACCCGGGTTGGA GCGGCCACCACCACCACCAACACACAATGGCAACACCCGACAGCAACACAATCAGATA AAAGAATACTTTGGGGGGAAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA 1621 1381 1441 1441 1501 1561 1201 1201 1261 1261 1321 1321 1381 셤 셤 g g Š 요 양 셤 ઠ 8 g ठ 8 ਨੇ

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ADB66587 standard; cDNA; 1679 BP

ADB66587;

(first entry) 04-DEC-2003 Novel human secreted and transmembrane protein PRO337 cDNA

Human; secreted and transmembrane protein; PRO; gene; ss;
Tumour necrosis factor alpha release; TNF-alpha release;
Tumour necrosis factor alpha release; TNF-alpha release;
Jucose uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
liver tumour; breast tumour; prostate tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.

97WO-US005230. 98WO-US012456. 98WO-US01468. 98WO-US017688. 98WO-US019093. 98WO-US019094. 98WO-US019330. 98WO-US0193310. 98WO-US0193310. 31-MAR-1997, 12-UUN-1998, 28-AUG-1998, 10-SEP-1998, 14-SEP-1998, 14-SEP-1998, 14-SEP-1998, 16-SEP-1998, 16-SEP-1998, 17-SEP-1998, 17-SEP-1998, 17-SEP-1998, 17-SEP-1998,

2002US-00127831 US2003082689-A1. 22-APR-2002; Homo sapiens 01-MAY-2003 ADB66587
ADB66587
AC ADB6
AC A

29-OCT-1998; 98WO-US022992.
20-NOV-1998; 98WO-US024855.
01-DEC-1999; 98WO-US02108.
05-JAN-1999; 99WO-US005108.
10-ARR-1999; 99WO-US0051010.
20-APR-1999; 99WO-US00519.
20-APR-1999; 99WO-US01010.
31 SEP-1999; 99WO-US010252.
31 SEP-1999; 99WO-US020594.
31 SEP-1999; 99WO-US021090.
31 SEP-1999; 99WO-US021090.
31 SEP-1999; 99WO-US021090.
31 SEP-1999; 99WO-US021090.
32 NOV-1999; 99WO-US021090.
33 NOV-1999; 99WO-US02851.
30 NOV-1999; 99WO-US02851.
31 SEP-1999; 99WO-US02851.
31 SEP-1999; 99WO-US02851.
32 NOV-1999; 99WO-US02851.
33 NOV-1999; 99WO-US02851.
34 NOV-1999; 99WO-US02855.
35 NOV-1999; 99WO-US02855.
36 NOV-1999; 99WO-US02855.
37 NOV-1999; 99WO-US02855.
38 NOV-1999; 99WO-US02855.
38 NOV-1999; 99WO-US02855.
39 NOV-US03099.
31 NOV-1999; 99WO-US03099.
31 NOV-1999; 99WO-US03099.
32 NOV-1999; 99WO-US03099.
33 NO-USC-1999; 99WO-US03099.
34 NOV-2000; 2000WO-US000376.
36 NOV-2000; 2000WO-US000376. 2001WO-US006666 2001US-00802706 2001US-00802706 2001US-00828366. 2001US-00854208. 2001US-00854208. 2001US-00854208. 2001US-00854208. 2001US-00854208. 2001US-00854208. 2000WO-US007377. 2000WO-US007532. 2000WO-US008439. 2000WO-US013705. 2000WO-US014042. 2000WO-US014941. 2000WO-US023522 2000WO-US023328 2000WO-US030952 2000WO-US030873. 2000WO-US032678. 2000US-00747259. 2001US-00796498. 2001WO-US006520. 2000WO-US034956 01-DEC-2000; 2 20-DEC-2000; 2 20-DEC-2000; 2 28-FBB-2001; 2 8-FBB-2001; 2 01-MAR-2001; 2 04-MAR-2001; 2 22-MAR-2001; 2 02-MAR-2000; 2 10-MAR-2000; 2 20-MAR-2000; 2 20-MAR-2000; 2 11-MAY-2000; 2 22-MAY-2000; 2 22-MAY-2000; 2 24-JUN-2000; 2 14-JUL-2000; 2 24-JUN-2000; 2 23-AUG-2000; 2 23-AUG-2000; 2 23-AUG-2000; 2 18-FEB-2000; 22-FEB-2000; 24-FEB-2000;

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The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the creases of TMF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation of differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of miner ear utricular supporting cells, cor stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of E-lymphocyte cells, for stimulating the proliferation of E-lymphocyte cells, for stimulating the proliferation of E-lymphocyte cells, for stimulating cells, for inhibiting the binding of the presence of tumour in a mammal. The tumour is lung, colon, breast, cells, for stimulating genomic and cDNA nucleotide sequences or attemers probes. (I) is also useful steparetion of adentify other proteins or molecules involved in binding in assays to identify other proteins or molecules involved in binding interaction. A polymucleotide (II) encoding (I) is useful in the development and configuration of PRO polypeptide, for generating therapeutically useful reagents, in gene therapy, for knockout animals which in turn are useful in the development and configuration is chromosome marker, and for generating cromosome identification, as chromosome marker, and for generating or chromosome identification, as chromosome marker, and for generating configuration of PRO polypeptide, for generating tells expression in generating cells, itsues or serum.

Configures. (I) and (II) are useful for tissue typing. This sequence encodes or any uniman secreted and transmembrane PRO polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New PRO nucleic acid, useful for preparing a composition for treating e.g. tumor or for tissue typing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 2; Fig 375; 637pp; English.
01-JUN-2001, 2001WO-US017800.
05-JUN-2001, 2001US-0084503.
14-JUN-2001, 2001US-008826342.
19-JUN-2001, 2001WS-00886342.
20-JUN-2001, 2001WS-00887879.
22-JUN-2001, 2001WS-US021066.
29-JUN-2001, 2001WS-US021066.
09-JUL-2001, 2001WS-US021166.
09-JUL-2001, 2001WS-00998827.
18-JUL-2001, 2001US-00998827.
16-AUG-2001, 2001US-00998817.
16-AUG-2001, 2001US-00991816.
16-AUG-2001, 2001US-00931836.
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P-PSDB; ADB66588.
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Human PRO polynucleotide #63

Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide; tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic.

Homo sapiens

US2003073817-A1. 17-APR-2003 26-AUG-2002; 2002US-00227883

01-AUG-2000; 2000US-0222425P. 01-JUN-2201; 2001WO-US017800. 29-JUN-2001; 201WO-US021066. 09-APR-2002; 2002US-00119480.

(GETH) GENENTECH INC.

Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI; Desnoyers L, Baker KP, De Grimaldi JC,

WPI; 2003-730024/69. P-PSDB; ADB84993.

New PRO polypeptides and nucleic acids encoding the polypeptides, useful e.g. in gene therapy, disease diagnosis, chromosome identification and e.g. in gene tr tissue typing.

Claim 2; Fig 125; 314pp; English

CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTTGGAGACACATCTCTCCCAAAGC 660

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The invention relates to human PRO polypeptides (secreted and transmambrane polypeptides) and the PRO polypuclectides encoding them.

The PRO polypeptides and polymuclectides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for detecting tumnour, rectal tumnour colon tumnour, breast tumnour, prostate tumnour, retail tumnour or liver tumnour) in a mammal, for prostate tumnour, rectal tumnour or liver tumnour) in a mammal, for stimulating the release of tumnour necrosis factor (TNP) alpha from human blood, for stimulating the proliferation of or gene conditoryte cells, for stimulating the proliferation of or gene expression in perioyte cells or for stimulating the proliferation of or gene captures in chromosome and gene mapping, in generating cantisense RNA and DNA, in preparing PRO polypeptides by recombinant technology, in generating transgenic animals or knock-out animals which antisense RNA and DNA, in preparing RNO polypeptides by recombinant captures and in generating probes. The PRO polypeptides, or anti-PRO markers and in generating probes. The PRO polypeptides, or anti-PRO antibodies, such as perioyte-associated tumnours and bone and/or cartilage condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as perioyte-associated tumnours and bone and/or cartilage disorders (e.g. arthritis, sports injuries), involving inducing the re-disorders (e.g. arthritis, sports injuries), involving inducing the re-disordernel electrophoresis, and in tissue typing. This equence represents a human PRO polypeptides are useful as ¥8888888888888888888888888888888

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tummour necrosis factor-alpha; TMF-alpha; chondrocyte cell; tummour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothalial cell; glucose; PRA; seeletal muscle cell; adipocyte cell; pericyte cell; edipocyte cell; pericyte cell; endothelial cell tube formation, bone disorder; cartilage disorder; endothelial cell tube formation, bone disorder; cartilage disorder; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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25-AUG-1999; 99WG-U08012252.

02-MAR-2000; 2000WG-US005841.

03-MAR-2000; 2000WG-US008439.

01-DEC-2000; 2000WG-US018072.
                                                               Human PRO polynucleotide #188.
          ADB89667 standard; cDNA; 1679
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                                             (first entry)
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                                                                                                                                                                                    Homo sapiens.
                                             04-DEC-2003
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                            ADB89667;
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New PRO nucleic acids and encoded polypeptides, useful in the treatment of cancer.

3

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gr Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-743896/70. P-PSDB; ADB89668.

(GETH) GENENTECH INC

Claim 2; Fig 375; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNP-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in penerating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful section in the development and screening of therapeutically useful medicament for treating a condition responsive to the polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies such as tumours, for stimulating and inhibiting proliferation of thuman microvascular endothelial cells, for modulating the uptake of glucose or FRA by skeletal muscle cells, for modulating or finner ear unricular supporting cells, for stimulating the proliferation of inner ear unricular supporting cells, for stimulating the proliferation and inner ear unricular supporting cells, or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating

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Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothellal cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
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                                                                      CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT
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The sequence data for this patent is also available in electronic format
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endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteogyycan; articular cartilage defect; osteoarthritis; rheumarcid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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99WO-USC28313.
99WO-USC28634.
99WO-USC28551.
99WO-USC28564.
99WO-USC3866.
99WO-USC30095.
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98WO-US012456.
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2000MO-US006319
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12-JUN-1998;
12-JUN-1998;
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12-AUR-1998;
14-SEP-1998;
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16-SEP-1998;
17-SEP-1998;
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18-MAR-1999;
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15-SEP-1999;
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Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G: Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z; Claim 2; Fig 375; 649pp; English. 02-UN-2000) 2000MO-US015474.

28-JUL-2000) 2000MO-US020710.

23-AUG-2000) 2000MO-US0207110.

24-AUG-2000) 2000MO-US023328.

08-NOV-2000) 2000MO-US023328.

10-NOV-2000) 2000MO-US033678.

20-DEC-2000) 2000MO-US038678.

20-DEC-2000) 2000MO-US038689.

22-PRAR-2001) 2001US-0086666.

10-MAR-2001) 2001US-00866216.

22-MAY-2001) 2001US-00866216.

25-MAY-2001) 2001US-00866216.

25-MAY-2001) 2001US-00866216.

25-MAY-2001) 2001US-0086634.

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25-MAY-2001) 2001US-0088637.

10-UN-2001) 2001US-0088637.

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20-UN-2001) 2001US-0088627.

16-AUG-2001) 2001US-0098887.

16-AUG-2001) 2001US-00931836.

16-DEC-2001) 2001US-00931836.

16-DEC-2001) 2001US-00931836. (GETH) GENENTECH INC WPI; 2003-743899/70. P-PSDB; ADB90400.

New secreted and transmembrane PRO polypeptides and nucleic acids, useful in gene therapy, and in the detection and treatment of tumor in a mammal.

3 Gao transmembrane polypeptides) and the polymucleotides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO propeptide, a method for stimulating the release of tumour necrosis factor-alpha (TMR-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for cetecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as this antisense RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FRA by skeletal muscle cells or adipocyte cells, for

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stimulating differentiation of adipocyte cells, for stimulating the proliferation of or gene expression in periotte cells, for stimulating the proliferation of numer ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, polypeptides are also useful for treating sports-related joint problems, polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalasseemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence erpresents a human PRO polymucleotide of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at sequence.html.
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100.0%; Score 1679; DB 1; Length 1679;

Best Local Similarity 100.0%; Pred. No. 6.7e-05;

Matches 1679; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                             Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
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GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGC

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glucose uptake modulator; FPA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
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98WO-US019093.
98WO-US019094.
98WO-US019177.
98WO-US019437.
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22-FEB-2000; 2
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24-FEB-2000; 2
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06-JAN-2000;
06-JAN-2000;
                                                                Homo sapiens.
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16-SEP-1998;
17-SEP-1998;
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29-OCT-1998;
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20-APR-1999;
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The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the transmembrane) polypeptides (I). (I) is useful for stimulating the roman blood, for modulating the uptake of glucose or FRA by skeletal muscle cells or adipocyte calls, for stimulating the proliferation or differentiation of chandrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear uticitular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of for I-lymphocyte cells, for stimulating the proliferation of GT-lymphocyte cells, for stimulating the proliferation of endothelial cells, for dispocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligomolecutide probes are useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New secreted and transmembrane PRO polypeptide useful for detecting presence of tumor in a mammal, or modulating the uptake of glucose of free fatty acid by skeletal muscle cells or adipocyte cells.
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Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
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2000WO-US030952
2000WO-US032678
2000WS-US032678
2000WS-US036673
2001WS-US03668
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2001US-00872035.
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2001US-00882636
2001US-00886342
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09-JUL-2001; 2001WO-US021735.
18-JUL-2001; 2001US-00908827.
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P-PSDB; ADB39501.
117-MAY-2000; 2
22-MAY-2000; 2
22-MAY-2000; 2
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23-AUG-2000; 2
23-AUG-2000; 2
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in assays to identify other proteins or molecules involved in binding interaction. A polynucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of RNO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and sorrenhing of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes. An anti-(I)-antibody is useful in diagnostic assays for RNO, e.g. detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This sequence encodes a novel human secreted and transmembrane PRO polypeptide.
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Matches 1679; Conservative 0; Mismatches 0; Indels 0;
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Mismatches

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Matches 1679; Conservative

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Tue Jun

The invention describes an isolated PRO (secreted and transmembrane)

CD polypeptide (I). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are
useful for stimulating the proliferation of compare expression in
bericyte cells. PRO357, PRO222, PRO1325 polypeptide are useful
for stimulating the proliferation or differentiation of chondrocyte

CC cells. PRO357, PRO725, PRO1185, PRO1195 polypeptide

TRO247, PRO131, PRO556, PRO982, PRO1185, PRO1196, PRO1419, PRO1419,

Alpha from human blood. PRO982, PRO351, PRO1856, PRO1419, PRO1419,

PRO1266, PRO137, PRO526, PRO186, PRO1186, PRO1191, PRO1411,

PRO1266, PRO137, PRO1186, PRO1186, PRO1191, PRO1411, PRO1411,

PRO1266, PRO137, PRO137, PRO1969, PRO1979, PRO1404, PRO1386,

PRO1266, PRO137, PRO1878, PRO1866, PRO1187, PRO1744, PRO1111,

PRO1278, PRO1378, PRO1469, PRO186, PRO1474, PRO1111, PRO1386,

PRO1379, PRO1878, PRO1469, PRO186, PRO1479, PRO1474, PRO1112,

CRO9840, PRO6799, PRO988, PRO1494, PRO1473, PRO1466, PRO1878,

PRO5273, PRO5259, PRO918, PRO1494, PRO1473, PRO1488, PRO4432,

CR PRO1887, PRO5289, PRO9186, PRO1494, PRO1474, PRO1577,

PRO5940, PRO6799, PRO918, PRO1494, PRO1474, PRO5778, PRO4788,

PRO5732, PRO5732, PRO7164, or PRO7455 polypeptide are useful for crimibiting the pro11feration of normal human dermal fibroblast cells.

CR PRO1891, PRO5732, PRO748, PRO1484, PRO1744, PRO5778, PRO5778,

PRO5732, PRO5732, PRO5745, or PRO7455 polypeptide are useful for cells taken from the mammal, and a control sample of colls taken from the mammal, and a control sample of colls taken from the mammal, and a control sample of colls taken from the mammal, and a control sample of the PRO polypeptides in the test sample as compared to the control sample of the presence of tumour in the mammal. The tumour is lung the mammal from the mammal from the coll tumour.

CU uned the proper tampent and gene mapping or gene therapy. (II) is useful for thromosome and gene mapping or gene therapy. (II) is useful for properting energial reagents. PRO579, PRO470 and transmembrane energial properting **a**8 PJ; Wood WI; Novel isolated PRO polypeptide useful for tissue typing, gene therapy, molecular weight markers in protein electrophoresis, for treating arthritis, tumor. tumour; (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour; lung colon tumour; breast tumour; prostate tumour; rectal tumour; lissue typing; chromosome mapping; gene mapping; Gerritsen ME, Goddard A, Godowski F Smith V, Stephan JF, Watanabe CK, Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Claim 2; Fig 125; 308pp; English. 25-JUL-2000; 2000US-0220607P. 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480. 09-AUG-2002; 2002US-00216165 ŗ. Ķ (GETH) GENENTECH INC Baker KP, Desnoyers Grimaldi JC, Gurney WPI; 2003-765494/72. P-PSDB; ADB78099. US2003092886-A1 PRO polypeptide Homo sapiens gene therapy 15-MAY-2003

Score 1679; DB 1; Length 1679; Pred. No. 6.7e-05;

100.0%;

Query Match Best Local Similarity

61 181 181 241 301 361 361 421 421 481 541 541 601 601 661 721 721 781 781 841 121 301 481 661 901 901 961 961 g à à 유 ઠે 8 셤 ò d à 셤 ઠે d d ò g 셤 ద ઠ 셤 ઠે d ò g ò g ઠે g à ò ò ò 심

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 11-MAR-1998;
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13-MAR-1998;
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             CAGCGAGGTGAGCAACGCCACGTCGAGGAGGGCAGGCTGCGTCTGGCTGCTGCTCTTCT
                                                                                        GCCGCCACCACCACCAACACACAACAGCAATGGCAACACCGACAGCAACAACAATCAGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human, PRO polypeptide; secreted protein, transmembrane protein, cell death, neuropathy, neuropathy related disease; Charcot-Warite-Tooth disorder, Refsum's disease, Krabbe's disease, chromosome mapping; gene mapping; genetic disorder; septic shock; antibacterial; immunosupressive; neuroprotective; gene; ss.
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97US-0064249P.
97US-006331P.
98US-0077450P.
98US-0077632P.
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03-NOV-1997;
13-NOV-1997;
21-NOV-1997;
110-MAR-1998;
11-MAR-1998;
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98US-0087208P.
98US-001052P.
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90US-001052P.
90US 10-MAR-1999; 10-MAR-1999; 12-MAR-1999; 22-MAR-1999; 26-MAR-1999; 26-APR-1999; 14-MAY-1999; 14-MAY-1999; 14-MAY-1999; 16-MAY-1999; 16-MAY-1999; 16-MAY-1999; 16-MAY-1999; 16-MAY-1999; 16-DC-1999; 16-JAN-2000; 11-FEB-2000; 11-FEB-2000; 11-MAR-2000; 11-MAR-2000; 11-MAR-2000; 11-MAR-2000; 30-MAR-2000; 22-MAY-2000; 30-MAY-2000; 30-MAY-2000; 28-JUN-2000; 28-JUL-2000; 15-MAY-1998;
15-MAY-1998;
15-MAY-1998;
18-MAY-1998;
22-MAY-1998;
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26-JUN-1998;
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32-DEC-1998;
32-DEC-1998;
32-DEC-1998;
33-DEC-1998;
33-DEC-1998;
34-MAN-1999;
36-MAN-1999;
36-MAN-1999;

24-AUG-2000, 2000WO-US023328.

28-NOV-2000; 2000WS-0079238.

21-DEC-2000; 2000WS-00732679.

21-DEC-2000; 2000WS-00747259.

20-DEC-2000; 2000WS-00747559.

20-DEC-2000; 2000WS-00747559.

21-DEC-2000; 2000WS-00747559.

22-MAR-2001; 2001WS-00816920.

22-MAR-2001; 2001WS-00816920.

22-MAR-2001; 2001WS-00816920.

10-MAY-2001; 2001WS-00814280.

10-MAY-2001; 2001WS-00817450.

11-MAY-2001; 2001WS-00817450.

11-MAY-2001; 2001WS-00817450.

11-MAY-2001; 2001WS-00817450.

25-MAY-2001; 2001WS-00817450.

11-MUN-2001; 2001WS-00817450.

11-MUN-2001; 2001WS-00817450.

20-UUN-2001; 2001WS-00816532.

20-UUN-2001; 2001WS-00816532.

20-UUL-2001; 2001WS-0081735.

30-UUL-2001; 2001WS-0081735. (GETH) GENENTECH INC

Length 1679; Query Match
100.0%; Score 1679; DB 1;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0;

9 Gaps . 0 Indels

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300 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCCTCAG 241

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CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CTGGATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 541 601

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RESULT 11 ADB87164 ID ADB87164 standard; cDNA; 1679

(first entry) 04-DEC-2003

Human PRO polynucleotide #63

Human, PRO, gene, se, secreted polypeptide; transmembrane polypeptide; tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TNP-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic.

Homo sapiens.

US2003088067-A1.

08-MAY-2003.

13-AUG-2002; 2002US-00219479

01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480.

(GETH) GENENTECH INC.

Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood r, Ar, Baker KP, Desnoyers Grimaldi JC, Gurney Baker KP,

WPI; 2003-657981/62. P-PSDB; ADB87165. One hundred and twenty two nucleic acids encoding PRO polypeptides, useful in gene therapy, chromosome identification, tissue typing, or hybridization probes in chromosome and gene mapping.

Claim 2; Fig 125; 314pp; English.

The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polypuclectides encoding them. The PRO polypeptides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for detecting tumour, rectal tumour or liver tumour, breast tumour, con prostate tumour, rectal tumour or liver tumour) in a mammal, for stimulating the release of tumour necrosis factor (TMF) alpha from human blood, for stimulating the proliferation of or gene conditions to stimulating the proliferation of or gene captression in pericyte cells or for stimulating the proliferation of corpus probes, in chromosome and gene mapping, in generating antisense RNA and DNA, in preparing PRO polypeptides by recombinant technology, in generating transgenic animals or knock-out animals which and used in the development and screening of therapeutically useful creagents, in generating probes. The PRO polypeptides, or anti-PRO markers and in generating probes. The PRO polypeptides, or anti-PRO antibodies, are useful for preparing a medicament for treating a condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and bone and/or cartilage disorders (e.g. arthritis, sports injuries), involving inducing the redisorders (e.g. arthritis, sports injuries), involving inducing the redisordertiation of chondrocytes. The PRO polypeptides are useful as medicular markers for protein electrophoresis, and in tissue typing. This sequence represents a human PRO polypeptide of the invention.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

ó Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;

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Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide; tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic.
                                                                        AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA
                                                                                                                            CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC
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                                            CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAAGGGCTCAGCCTC
         GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACCTTCCCCACCCGGGAAAGGCT
                              GCCGCCACCACCACCACCACACACACACACACACACCCGACACGACACCAATA
                                                              AAAGAATACTTTGGGGGAAAAGAGTTTTAAAAAAAAATTGAAAATTGCCTTGCAGATA
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GGTCTTGCACCTGCTTCTCAAATTTTGATGTGTGCCACTTCCCCAACCCGGGAAAGGCT
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Smith V, Stephan JF, Watanabe CK, Wood
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24-FEB-2000; 2000WO-US005004.
02-WAR-2000; 2000WO-US005841.
01-UUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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New isolated PRO polypeptides, useful for tissue typing, gene therapy, as molecular weight markers in protein electrophoresis, and for treating arthritis and tumors. WPI; 2003-777259/73. P-PSDB; ADB84747.

2; Fig 125; 308pp; English Claim

The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polypucleotides encoding them. The PRO polypeptides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for detecting tumour, rectal tumour or liver tumour, breast tumour, compared tumour necrosis factor (TMF)-alpha from human constituting the release of tumour necrosis factor (TMF)-alpha from human blood, for stimulating the proliferation of or gene conditoryte cells, for stimulating the proliferation of or gene conditoryte cells, for stimulating the proliferation of or gene conditoryte cells, for stimulating the proliferation of or gene conditoryte cells, for stimulating the proliferation of or gene conditisation probes, in oftromosome and gene mapping, in generating cantisense RNA and DNA, in preparing PRO polypeptides by recombinant contisense RNA and DNA, in preparing PRO polypeptides by recombinant contisense RNA and DNA, in preparing the scenning of therapeutically useful creagents, in generating probes. The PRO polypeptides, or anti-PRO markers and in generating probes. The PRO polypeptides, or anti-PRO antibodies, and used in the re-condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and bone and/or cartilage disorders (e.g. arthritis, sports injuries), involving inducing the re-condition which is responsive to the PRO polypeptides are useful as molecular markers for protein electrophoresis, and in tissue typing. This sequence represents a human PRO polypeptide of the invention.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

300 480 120 180 CTTCACGGGGCTGGCTGTCTCTTTCCAAGGAGTGCCCGTGCGCAGAGATGC 240 240 CACCTTCCCCAAAGCTATGGACAACGTGAGGTCCGGCAGGGGGGAGAGCGCCACCCTCAG 300 360 360 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC 420 420 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 480 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 180 9 9 CACCITICCCCAAAGCIAIGGACAACGIGACGGGGCAGGGGGGGAGAGCGCCACCCICAG GIGCACTAITGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA TGCTGGGAATGACAAGTGGTGCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAAC GITGIGICCTICAGCAAAACAGTGGATTITAAATCTCCTTGCACAAGCTTGAGAGCAACAC aatctatcaggaaagaaagaaaaaaaaaaaccgaacctgacaaaaaagaaaaaaagaa cricacececerecrererererererereaaeaagaececereceaeceaagaree GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGCCCCTTACACCTGCTC Gaps . 0 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0; Best Local Similarity 100. Matches 1679; Conservative н 61 121 181 241 181 241 301 301 361 361 421 421 Query Match 쉱 엄 8 8 ð 8 6 ઠે g ઠે 8 8 ò g ठ 셤

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1080 1500 1380 1020 1020 1080 1200 1200 1320 840 999 9 720 780 840 900 900 960 540 600 GCCGCCACCACCACCACCAACAGCAATGGCAACACACCGACAGCAACCACCAATCAGATA rrraggracaarggagrrrrcrrrrcccaaacggaagaacaccaccacccccccrrga CCCACTGCAAGCTGCATCGTGCAACTCTTTGGTGCCAGTGTGGGCAAGGCTCAGCCTC TCTGCCCACACAGAGTGCCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA GICCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCGCTGCGGGGCACTTTG GGTGCAGACAGACACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC GGTTGGCTTTGTGAGATGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC **AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCCGTGGTACGGAGAGTAAA** GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 961 CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT GCCTCCAACAAGCTGGGCCACAACAATGCCAGCATCATGCTATTTGGTCCAGGCGCGGT CAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGGTCTGGCTGCTGCTCTTCT CAGCGAGGTGAGCTAACGGCACGTCGAGGAGGCAGGCTGCGTCTGGCTGCCTCTTCT 1141 GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT <u>aaagaatactttiggggggaaaagagttttaaaaaaaaattgaaattgccttgcagata</u> CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC crecaraccaacrecaeaccaeaeccraceerracrieeaeacacarcreceaaee GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGGATCACCCGGGAGCAGTC CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGGTGAAAGTGGAAAACAGACCTTT CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGAAAACAGACCTTT GGCCTCCAACAAGCTGGGCCACACAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT GCCGCCACCACCACCACACACACACACAGCAATGGCAACACCGGACAGCAACCAATCAGATA AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAATTGAAAATTGCCTTGCAGATA **CAAAATIGTAGAGATITCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC** CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGCCACTTCCCCACCTGCGGAAAGGCT 1261 1321 541 1081 1141 1201 1261 1321 1381 1381 1441 1501 841 1021 1021 1081 1201 1441 1501 1561 601 661 661 721 721 781 841 901 901 961 481 541 601 781 g g g 셤 g d g g ò g 셤 유 ઠે 8 ద ઠે ò ò ò 8 ઠે ઠે ò 엄 ठ 8 원 8 qq ò ઠે 8 8

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The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (1). (1) is useful for stimulating the cransmembrane) polypeptides (1). (1) is useful for stimulating the graph mush ealls of adipocyte cells, for stimulating the proliferation of adipocyte cells, for stimulating the proliferation of or gene expression in periorte cells, for stimulating the proliferation of or gene expression in periorte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the reases of acytokine from PBMC cells, for inhibiting the binding of A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal cervical or liver tumour. The oligomucleotide probes antisense probes. (1) is also useful as therapeutic agent. PRO is useful in assays to identify other proceins or molecules involved in binding in assays to identify other proteins or molecules involved in binding and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for generating transgenic animals or
GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCCAAGCGTGGCGCTGCGGGCACTTTG 1620
                                                                                                                                                                                                                                                                                                                                                            Human; secreted and transmembrane protein; PRO; gene; ss;
Tumour necrosis factor alpha release; TWF-alpha release;
Jucose uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
                                                                in
or
                                           New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 PRO4978, useful in molecular biology, chromosome and gene mapping, generating antisense RNA and DNA, and in gene therapy.
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Gerritsen MB, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                          Novel human secreted and transmembrane protein PRO337 cDNA
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                                                                                                                                                                                               ADB47123 standard; cDNA; 1679 BP
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01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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                                                                                                                                                                                                                                                                                     (first entry)
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knockout animals which in turn are useful in the development and screening of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This sequence encodes
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                                                                                                                                          Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
                                                                                                            a novel human secreted and transmembrane PRO polypeptide.
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ADB83861 standard; cDNA; 1679 (first entry) 04-DEC-2003 ADB83861;

Novel human secreted and transmembrane protein PRO337 cDNA.

human, secreted and transmembrane protein, PRO; gene; ss; cytostatic, vulnerary, antiarthritic, pericyte cell proliferation; pericyte cell proliferation; pericyte cell differentiation; chondrocyte cell differentiation; tumour necrosis factor alpha release; (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; lissue typing; chromosome mapping; gene mapping;

The invention describes an isolated PRO (secreted and transmembrane)

Dolypeptide (1). PRO922, PRO1160, PRO1187 or PRO1329 polypeptide are

useful for stimulating the proliferation of or gene expression in

CC cells. PRO321, PRO229, PRO1272 or PRO4405 polypeptide are useful

CC estimulating the proliferation or differentiation of chondrocyte

alpha from human blood. PRO215, PRO1155, PRO1130, PRO1419, PRO1419,

ALPHA from human blood. PRO0321, PRO125, PRO1130, PRO1419, PRO1419,

RRO247, PRO137, PRO326, PRO1186, PRO1192, PRO1279, PRO1419, PRO1419,

CC PRO1266, PRO1381, PRO326, PRO1186, PRO1191, PRO1411, PRO1410,

CC PRO1266, PRO1381, PRO326, PRO1186, PRO1191, PRO1274, PRO1311, PRO1310,

CC PRO1266, PRO1381, PRO1361, PRO1819, PRO1274, PRO1411, PRO1310,

CC PRO1266, PRO1381, PRO1361, PRO1409, PRO1440, PRO1411, PRO1312,

CC PRO1286, PRO1384, PRO1409, PRO1409, PRO1440, PRO1414, PRO1312,

CC PRO1489, PRO5186, PRO1484, PRO1409, PRO1440, PRO1414, PRO141, PRO1814, PRO1484, PRO1416, PRO1409, PRO140 New isolated polypeptides designated PRO polypeptides including polypeptides useful for stimulating the proliferation or differentiation of specific cell types, and for diagnosing cancer. Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI; Claim 2; Fig 125; 314pp; English. 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480. 09-AUG-2002; 2002US-00216159. 25-JUL-2000; 2000US-0220607P. Desnoyers L, (GETH) GENENTECH INC. WPI; 2003-657584/62. P-PSDB; ADB83862. sport injuries). PRO polypeptide. US2003069397-A1 Homo sapiens. Grimaldi JC, 10-APR-2003. ΚP, Baker

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

0; 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; Live 0; Mismatches 0; Indels 0; Query Match
Best Local Similarity 100.
Matches 1679; Conservative

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standard; cDNA; 1679 BP

(first entry) 04-DEC-2003 PRO polynucleotide #188.

Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tummour necrosis factor-alpha; TNP-alpha; chondrocyte cell; tummour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; PRA; seeletal muscle cell; adipocyte cell; glucose; PRA; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation, bone disorder; cartilage disorder; chount of injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration. ADB86730 s XX ADB86730 s XX ADB86730, XX ADB86730, XX Human PRO XX Human PRO XX Human gen KW Cancer; ad KW Sherr mic KW Short mic KW Short mic KW Short sinj KW

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US2003082697-A1.

22-APR-2002;

98US-0104987P. 99WO-US020111. 99US-00403297. 2000WO-US034342. 2001US-00028078. 20-OCT-1998; 01-SEP-1999; 18-OCT-1999; 18-FEB-2000; 01-DEC-2000; 19-DEC-2001;

us-10-017-084a-522.rng

(GETH) GENENTECH INC

Gao W; Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Ga Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-743895/70. P-PSDB; ADB86731.

New secreted and transmembrane PRO polypeptides, useful in the diagnosis and treatment of cancer.

Claim 2; Fig 375; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the prosterion or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, collecting the presence of a tumour in a mammal (e.g. adrenal, lung, collecting the presence of a tumour in a mammal (e.g. adrenal, lung, collon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in nolecular biology, including uses as this state of the property of the p

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

CTTCACGGGGCTGCTCTGTGTCTTCCAAGAGTGCCCGTGCGCAGCGGAGAGATGC 240 9 9 1 GITGIGICCTICAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCCTTGCACAAGCTTGAGAACAC Gaps .; 0 Query Match
100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; 181 181 241 셤 ર્જ 9 9 9 ઠે 셤

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       TTTAGGTACAATGGAGTTTTCTTTTCCCAAAGGGAAGAAGAACACAGCACACCGGGCTTGGA
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Novel human secreted and transmembrane protein PRO337 cDNA.

human, secreted and transmembrane protein, PRO, gene, 88, cytostatic, vulnerary, antiarthritic; pericyte cell proliferation, pericyte cell differentiation, chondrocyte cell differentiation, tumour necrosis factor alpha release (TNF)-alpha release, dermal fibroblast cell proliferation, dermal fibroblast cell differentiation, into into it undur, lumour, lumour, lumour, lumour, prostate tumour, rectal tumour, lumour, lumour, prostate tumour, rectal tumour, lumour, lumour, prostate tumour, prostate gene therapy

Homo sapiens

US2003092887-A1.

15-MAY-2003,

12-AUG-2002; 2002US-00218956.

29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480.

(GETH) GENENTECH INC.

Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood Desnoyers L, Baker KP, De Grimaldi JC,

2003-777258/73. P-PSDB; ADB73017 Novel isolated PRO polypeptide useful for tissue typing, gene therapy, molecular weight markers, for treating arthritis, tumor.

Claim 2; Fig 125; 308pp; English

The invention describes an isolated PRO (secreted and transmembrane) bolygeptide (1). PRO982. PRO1160, PRO1187 or PRO1329 polygeptide are useful for simulating the proliferation of or gene expression in pericyte cells. PRO357, PRO229, PRO1272 or PRO4405 polypeptide are useful for stimulating the proliferation or differentiation of chondrocyte cells. PRO357, PRO357, PRO1155, PRO1155, PRO1151 polypeptide are useful for stimulating the release of tumour necrosis factor (TNF)-

cc alpha from human blood. PRO982, PRO357, PRO1306, PRO1419, PRO214, PRO227, PRO326, PRO323, PRO526, PRO323, PRO526, PRO1081, PRO1134, PRO1136, PRO1305, PRO1305, PRO1307, PRO1244, PRO1274, PRO1137, PRO1136, PRO1305, PRO1306, PRO1307, PRO 120 180 180 240 240 300 300 360 360 420 420 480 480 540 600 9 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT 241 CACCTICCCCAAAGCTAIGGACAACGTGACGGCCCGCAGGGGAGGAGAGCGCCACCTCAG 301 érecacrarreacaacceercacceerecerecereceraaaccecaccarecrera CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 61 AATCTATCAGGAAAGAAAGAAAAAAAACGAACCTGACAAAAAAGAAAAAAGAAG CTTCACGGGGCTGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAATGC CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCA 361 TOCTOCCAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCAAAC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 481 GGTGCAGACAGACACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 481 GGTGCAGACAACCACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 1 cricincincadeaaacaciccarriaaarciccirccacaaccricacaacac AATCTATCAGGAAAGAAAGAAAGAAAAAAAAACCGAACCTGACAAAAAAGAAAAAGAAG CTTCACGGGGCTGCTCTCTTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC GITGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT Gaps .; 0 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; tive 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Query Match Best Local Similarity 100. Matches 1679; Conservative 541 (181 181 н 61 241 301 421 g 9 ò ВÞ 유 ò ò g ò g ઠે 8 ò 셤 ઠે ద ò ò

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cell death; neuropathy; neuropathy related disease; Charcot-Marie-Tooth disorder; Refsun's disease; Krabbe's disease; chromosome mapping; gene mapping; genetic disorder; septic shock; antibacterial; immunosupressive; neuroprotective; gene; ss.
                                                                                                                                            PRO polypeptide; secreted protein; transmembrane protein;
                                                                                                          Human PRO polynucleotide sequence #133.
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9804S-0077641P

9804S-0078910P

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97US-0064249P.
97US-0065311P.
97US-0066364P.
98US-0077450P.
ADB76744 standard; cDNA; 1679
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98US-0083326P.
98US-00833292P.
98US-0083499P.
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The present invention relates to the isolation of novel human PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides are secreted and transmembrane proteins. The PRO polypeptides are useful for detecting other PRO polypeptides, for linking bioactive molecules to cells expressing PRO polypeptides, for modulating biological activities of cells expressing PRO polypeptides, for modulating identifying agonists or antagonists. The bioactive molecule maybe a toxin, radiolabel or antibody, and cause cell death. The PRO polypeptides are useful for treating neuropathy and neuropathy related diseases such as Charcot-Marie-Tooth disorder, Refsuw's disease, and Krabbe's disease. The polymucleotide sequences encoding PRO polypeptides are useful as hybridisation probes, in chromosome and gene mapping, in the generation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New PRO polypeptides useful for treating peripheral neuropathy, neuropathies associated with systemic disease such as post-polio syndrome or AIDS-associated syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME; Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton Stewart TA, Tumas D, Williams PM, Wood WI;
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Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;
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30-DEC-1999; 99WO-US031243.
30-DEC-1999; 99WO-US031274.
50-JAN-2000; 2000WO-US000219.
66-JAN-2000; 2000WO-US000277.
61-JEN-2000; 2000WO-US000277.
61-JEN-2000; 2000WO-US000376.
11-FEB-2000; 2000WO-US0003491.
24-FEB-2000; 2000WO-US005841.
10-MAR-2000; 2000WO-US006319.
21-MAR-2000; 2000WO-US006319.
21-MAR-2000; 2000WO-US006319.
21-MAR-2000; 2000WO-US01941.
22-MAR-2000; 2000WO-US01941.
23-MAR-2000; 2000WO-US01941.
24-JUL-2000; 2000WO-US01956.
24-JUL-2000; 2000WO-US01956.
24-JUL-2000; 2000WO-US01969.
25-MAR-2001; 2001WO-US032678.
20-DEC-2000; 2000WO-US032678.
20-DEC-2000; 2000WO-US032678.
20-JUN-2001; 2001WO-US03969.
20-JUN-2001; 2001WO-US019692.
20-JUN-2001; 2001WO-US011969.
20-JUN-2001; 2001WO-US011969.
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P-PSDB; ADB77336

useful for preparing a composition for treating e.g or for tissue typing. acid, nucleic

2; Fig 375; 637pp; English

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The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (1). (1) is useful for stimulating the cransmembrane from human blood, for modulating the uptake of glucose of FRA by skeletal muscle cells or adipocyte cells, for cales from human blood, can adipocyte cells, for stimulating the proliferation of differentiation of chondrocyte cells, for stimulating the proliferation of name are utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of cells, for inhibiting the binding of the release of two trimulating the binding of the release of two trimulating the binding of the release of two trimulating the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the release of tumour in a mammal. The tumour is lung, colon, breast, cells, for stimulating genomic and cDNA nucleotide sequences or artisense probes. (1) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. A polymucleotide (II) encoding (I) is useful in the development and screen mapping, in generating of therapeutically useful reagents, in gene therapy, for preparation of PRO polypeptide, for generating transgenic animals or chromosome identification, as chromosome marker, and for generating of chromosome identification, as chromosome marker, and for generating concept of the sequence encodes confinity purification of RO from recombinant cells ulture or natural confinity purification of RO from recombinant cells ulture or natural confinity purification of RO from recombinant cells ulture or natural confinity purification of RO from recombinant cells ulture or natural confinity purification of RO from recombinant cells ulture or natural confinity purification and transmembrane RO polypeptide.

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Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

120 300 360 420 240 240 360 480 120 180 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCCACCCTCAG 300 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC 420 9 60 GIGCACIATICACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA TOCTOGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGAGACGAGGGCCCTTACACCTGCTC GITGIGICCTICAGCAAAACAGTGGATTTAAAICTCCTIGCACAAGCTTGAGAGCAACAC AATCTATCAGGAAAGAAAGAAAAAAAACGGAACCTGACAAAAAAGAAAAAAGAAG 12.1 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT CTTCACGGGGCTGCTCTCTCTCTTCCAAGGAGTGCCCCGTGCGCAGCGGAGATGC GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTTA AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT Gaps ö ; Score 1679; DB 1; Length 1679; Pred. No. 6.7e-05; 0; Mismatches 0; Indels 0; Query Match
Best Local Similarity 100.0%;
Matches 1679; Conservative 0 -Н 61 121 181 181 241 241 301 301 361 361 421 121 g ò g ò a ઠે d ò g à g ઠે ద 8 8

1440 1260 1020 1020 1080 1200 1560 720 840 840 900 900 660 1201 GCCGCCACCACCACCAACACAACAGGAATGGCAACACGGACAGGAACCAATCAGATA TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCCAAATTCAATCA CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1021 GGCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT GGTCTTGCACCTGCTTCTCAATTTTGATGTGTGCCACTTCCCCACCCGGGAAAGGCT 1321 AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAAAATTGAAAATTGCCTTGCAGATA AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA TITAGGTACAATGGAGTITICTITICCCAAACGGGAAGAACACACACACCCGGCTIGGA cccacrecaacrecarceaccactriridereccadiereseaagescricascorc **AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCGCGCCGTGGTACGGAGAGTAAA** AGGGGACTACGAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGAGAGTAAA CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT CAGCGAGGTGAGCTAACGGCACGTCGAGGAGGGCAGCTGCGTCTCGCTGCTGCCTCTTCT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT 481 GGTGCAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTCATGTGCAAGTATCTCC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC **GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG** 841 ACAAAAGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGTA CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGAGGGTGAAAAGTGGAAAAACAGACCTTTT CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGAGGGGTGAAAGTGGAAAACAGACCTTT CCTCTCAAAACTCCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT CAGCGAGGTGAGCAACGCCACGTCGAGGAGGCAGGCTGCGTCTGGCTGCTGCTTCTT GCCGCCACCACCACCAACACACAGCAATGGCAACACCGGACAGCAACCAATCAGATA CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC GGCCTCCAACAAGCTGGGCCACAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT 1141 1261 1321 1381 1441 1501 1021 1081 1081 1201 1261 1441 1501 541 541 601 601 661 661 721 721 781 781 841 901 901 961 961 1141 481

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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNP-alpha) from human blood, a method for stimulating the polification or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular blology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polymucleotides may also GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCGCGGGGCACTTG 1620 Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tummour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tummour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; PFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; artilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration. New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for the diagnosis, prevention and/or treatment of tumors, such as lung, colon, breast, prostate, rectal, cervical and/or liver 3 Beresini M, Deforge L, Desnoyers L, Filvaroff E, G: MB, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z; Human PRO polynucleotide SEQ ID NO 375 Claim 2; Fig 375; 637pp; English. 01-SEP-1999; 99WO-US020111. 18-CCT-1999; 99UG-00403297. 30-NOV-1999; 99WG-US028313. 18-FEB-2000; 2000WG-US034342. 01-DEC-2000; 2000WG-US032678. 19-DEC-2001; 2001US-00028072. ADB34492 standard; cDNA; 1679 24-APR-2002; 2002US-00131818. (first entry) Gerritsen ME, Goddard Smith V, Stewart TA, (GETH) GENENTECH INC. WPI; 2003-755072/71. P-PSDB; ADB34493. US2003077717-A1. Homo sapiens. 04-DEC-2003 24-APR-2003 07-0CT-1998; Baker KP, 1621 (ADB34492; tumors. RESULT 19
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be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are reagents. The PRO polypeptides or antibodies are used in preparing a redicament for treating a condition responsive to the polypeptides or antibodies, and inhibiting proliferation of medicament for treating a condition responsive to the prolypeptides or antibodies, and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or FPA by skeletal muscle cells or adipocyte cells, for stimulating proliferation of or gene expression in periotyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducting endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and artilage are useful for treating sports related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-completed disorders such as various thalassemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polymucleotide of the invention. Note: 360 360 420 420 480 480 600 120 180 180 300 300 120 9 9 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 541 CAAAATTGTAGAATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCTCAG Grecactarreacaaccedercaccedereeccreecraaaccecaecaccarcera TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCAAAC GGTGCAGACAGACACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAGTATCTCC CTTCACGGGGCTGCTCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTTA GCAGTACAGCATCGAGATCCAGAACGTGGATGTATGACGAGGGCCCTTACACCTGCTC denecadacadecadeceaadeadecentradecenceaeceaenteredadaadaadece CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT cricacedescrescretrerererererereresassasses 1 GIIGIGICCIICAGCAAAACAGIGGAITITAAAICICCIIGCACAAGCIIGAAGAACACAC 1 cricicircicadaaacacicaarriraarcicciigcacaagciigagagcaacac Gaps .; 0 Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Indels 100.0%; Score 1679; DB 1; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; from USPTO at segdata.uspto.gov/sequence.html. Query Match Best Local Similarity 100. Matches 1679; Conservative 361 481 541 61 121 181 181 241 301 301 361 421 421 481 음 g a ઠે ద ò à 8888888888888888888888888888888 유 ò ò 쉱 8 g ò 셤 à à 셤

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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the retecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymidetides are useful in molecular biology, including uses as colon, breast, probes, in chromosome and gene mapping, in generating antiense RNA and DNA and in gene therapy. The polymucleotides may also antiense RNA and DNA and in gene therapy. The polymucleotides may also continue the proposition of the polymorleotides of the used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful caseful in the development and screening of therapeutically useful caseful in the development and screening of therapeutically useful caseful in the development and screening of therapeutically useful caseful in the development and screening of therapeutically useful conflictation of stimulating and inhibiting proliferation of number eating and inhibiting proliferation of of number ear utricular supporting cells, for stimulating cells, for stimulating endothelial cells or adipocyte cells, for stimulating cells, for inducing endothelial cells useful and profice cells, for stimulating cells, for inducing endothelial cells to a supporting and proteoglycans cells, for meantilise and volve eartilage disorders such as sports injuries and arthritis and rheumatoid arthritis and rheumatoid arthritis and rheumatoid arthritis properties. Osteoarthritis and rheumatoid arthritis sports. Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; inner ear utricular supporting cell; pericyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration. New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for the diagnosis, prevention and/or treatment of tumors, such as lung, colon, breast, prostate, rectal, cervical and/or liver tumors. Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z; Human PRO polynucleotide SEQ ID NO 375. Claim 2; Fig 375; 637pp; English. 01-DEC-1999; 99WO-US028634. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072. 09-FEB-1999; 99US-0119341P. 24-APR-2002; 2002US-00131824 (first entry) (GETH) GENENTECH INC WPI; 2003-755074/71. P-PSDB; ADB35597 US2003077719-A1. Homo sapiens. 24-APR-2003 04-DEC-2003 ADB35596; 1140 1380 1440 1440 1500 1560 1620

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associated disorders such as various thalassaemias and conditions which
may benefit from enhanced local immune system cell infiltration. This
sequence represents a human PRO polynucleotide of the invention. Note:
The sequence data for this patent is also available in electronic format
from USPIO at seqdata.uspto.gov/sequence.html.
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2002US-00131813

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   24-APR-2003
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis a factor-alpha (TWR-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, coliferation or differentiation of chondrocyte cells and a method for proliferation presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, in generating the probaring pRO plypeptides by recombinant techniques and in colon, breast probably and in gene therapy. The polymucleotides may also antisense RNA and BNA and in gene therapy. The polymucleotides may also constraing either transgenic animals or knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening or knock-out animals which are useful in the development and screening or knock-out animals which are useful in the development and screening or knock-out animals which are useful as tumours, for stimulating inhibiting proliferation of or gene expressors, to adipocyte cells, for stimulating of thuman microvascular endothelial cells, for middlating the uptake of stimulating differation of inner ear utricular supporting cells or T-lymphocyte cells, for stimulating the proliferation of inner ear utricular supporting expense of professions of independent and supporting ear useful for treating various meaning and cartings and atticular cartilage are useful for treating various mammals and condition. Note: the propressor as human PRO polympeptides or allo useful sorterating various mammals and condition. We sequence tespersents a human PRO polympeptides or the profession of the sequence data fo nucleic acids, useful chromosome markers, Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Mood WI, Zhang Z; v secreted and transmembrane PRO polypeptides and gene therapy, in chromosome and gene mapping, as tissue typing, and in identifying chromosomes. Claim 2; Fig 375; 637pp; English. 01-SEP-1999; 99WO-US020111. 18-OCT-1999; 99US-00403297. 18-EEB-2000; 2000WO-US004342. 10-NOV-2000; 2000WO-US036873. 01-DEC-2000; 2000WO-US032678. (GETH) GENENTECH INC 2003-755071/71. WPI; 2003-755071/ P-PSDB; ADB33941.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

·, Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0;

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10-MAY-2001; 2001US-00854208.
10-MAY-2001; 2001US-00866216.
25-MAY-2001; 2001US-00866216.
25-MAY-2001; 2001US-008660216.
25-MAY-2001; 2001US-00866034.
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01-JUN-2001; 2001WO-US017092.
01-JUN-2001; 2001WS-00874503.
14-JUN-2001; 2001US-00874503.
14-JUN-2001; 2001US-00886342.
22-JUN-2001; 2001WS-00886342.
22-JUN-2001; 2001WS-0088637.
22-JUN-2001; 2001WS-0088637.
23-JUN-2001; 2001WS-00896827.
65-JUL-2001; 2001WS-00996827.
06-JUL-2001; 2001WS-00996827.
16-JUL-2001; 2001US-00996827.
16-JUL-2001; 2001US-00996827.
16-JUL-2001; 2001US-00996827.
16-JUL-2001; 2001US-00996827.
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(GETH) GENENTECH INC

Gao Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-755073/71. P-PSDB; ADB35045.

New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for the diagnosis, prevention and/or treatment of tumors, such as lung, colon, breast, prostate, rectal, cervical and/or liver tumors.

Claim 2; Fig 375; 638pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the actoralpha (TNR-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and inver tumours). The polynucleotides are useful in molecular biology, including uses a hybridisation probes, in chromosome and gene mapping, in generating chybridisation probes, in chromosome and gene mapping, in generating chybridisation probes, in chromosome and gene mapping, in generating che used in preparing PRO Polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of theman microvascular endothelial cells, for modulating the uptake of glucose or PRA by skeleral muscle cells, for stimulating differentiation of adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating various bone and/or cartilage disorders such as sports injunities and cells, for artitlage disorders such as sports injunities PRO polypeptides which stimulate the release of proteglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthilis and rheumatoid arthritis. PRO polypeptides which stimulate the release of proteglycans articular cartilage defects, osteoarthritis and chemical immune system cell infilteration. The sequence data for this patent is also ava from USPTO at segdata.uspto.gov/sequence.html.

BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Sequence 1679

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Human; gene; 88; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FRA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; atticular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; Human PRO polynucleotide SEQ ID NO 375. ADB36148 standard; cDNA; 1679 BP (first entry) 04-DEC-2003 ADB36148;

rheumatoid arthritis; haemoglobi immune system cell infiltration. 24-APR-2002; 2002US-00131830. JS2003077720-A1 Homo sapiens

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09-DEC-1999; 99US-0170262P.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
                                                                                        (GETH ) GENENTECH INC.
                                                                                                                                     Baker
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3 Gao Deforge L, Desnoyers L, Filvaroff E, Ga A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Beresini M, E, Goddard Stewart TA, Gerritsen ME, Smith V, Stewa

WPI; 2003-755075/71. P-PSDB; ADB36149 New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for the diagnosis, prevention and/or treatment of tumors, such as lung, colon, breast, prostate, rectal, cervical and/or liver tumors.

Claim 2; Fig 375; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, luig, color, breast, prostate, rettal, kidhey, cervical and liver tumours). The polynucleotides are useful in molecular bloiogy, in generating thybridisation probes, in chromosome and gene mapping, in generating color, breast, prostate, rectal, kidhey, cervical and liver tumours). The polynucleotides are useful in molecular bloiogy, in generating the problem bloiogy in generating color, breast, prostate and screening of knock-out animals which are a useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful structured by a tumours, for stimulating of interpating a condition responsive to the polypeptides or medicanent for treating a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or from the development muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating differation of organ muscle cells or adipocyte cells, for stimulating attentiation of ane expression in periotyte cells, for stimulating and condition cartilage are useful for treating various mammals and condition. The problems are useful for treating various mammals and condition. The associated disorders such as various thalassaemias and condition. The sequence expression in properting cells or a finance of the invention. Note: the sequence expression and propremented or the problems of the sequence represents a human PRO polymulation of the invencion. The sequence represe

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

ô 180 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 60 61 AATCTATCAGGAAAGAAAGAAAGAAAAAACCGAACCTGACAAAAAAAGAAAAAAAGAAG 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT GITGIGICCTICAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC Gaps 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0; Matches 1679; Conservative Similarity н 61

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Tumour necrosis factor alpha release; TNF-alpha release;
Judose uptake modulator;
cell proliferation stimulator; FRA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
ling tumoue; colon tumour; breast tumour; proestet tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
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CTTCACGGGGCTGCTCTCTGTGTCTTCCAAGGAGTGCCCCGTGCGCAGCGGAGATGC
                           CTTCACGGGGCTGCTCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGAGAAGAAGA
                                                                                   CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCCACAG
                                                                                                                                                                        GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA
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The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (1). (1) is useful for stimulating the crelease of TWF-alpha from human blood, for modulating the uptake of glucose or FRA by skeletal muscle cells or adiporte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of adifferentiation of adipocyte cells, for stimulating proliferation of adifferentiation of adipocyte cells, for stimulating proliferation of adifferentiation of adipocyte cells, for stimulating proliferation of adifferentiation of adipocyte cells, for inhibiting the binding cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, cervical or liver to cells, for other proceins or molecules involved in binding interaction. A polymelecide (II) senceding (I) is useful in chromosome cervical cervical or molecules involved in binding interaction, a polymelecide (II) encoding (I) is useful in the development and screening of therapeutically useful reagents, in gene therapy, for chromosome interaction, in specific cells, tisques or serum, and for detecting its expression in specific cells, tisques or serum, and for a novel human secreted and transmembrane PRO polypeptide.

540 540 120 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT 180 180 240 CTTCACGGGGCTGCTCTGTGTCTCTTCCAAGAGTGCCCGTGCGCACGCGGAGAGTGC 240 300 360 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCTCTCTA 360 420 420 480 480 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 600 9 9 GTGCACTATTGACAACCGGGTCACCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCA GCAGTACAGCATCGAGATCCACAACGTGGATGTGTATATGACGAGGGCCCTTACACCTGCTC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGCCCCTTACACGTGCTC GGTGCAGACAGACACCAAAGCCTCTAGGGTCCACCTCATGTGCAAGTATCTCC CTTCACGGGGCTGCTCTCTTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGTGC CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCTCAG TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGCTTCTGAGCACACCAAAAC GGTGCAGACAGACCACCAACGAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC ; 0 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Query Match Best Local Similarity 100. Matches 1679; Conservative 241 301 181 421 121 181 241 301 361 421 181 481 541 දු පු ያ ያ ద 59 원 g g ò 엄청 ò 8 8 8

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ò	н	CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 660
Д	601	.haciggiagaccagagcciacggiiactiggagacacaictccccaaagc 66
ò	661	ACTTGGAATTCAGGGCATCACCCGGGAGCAGTC 72
Ор	661	cagrc 72
ò	721	AGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCCGTGGTACGGAGAGTAAA 780
Ωp	721	78
È	781	4,
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ò	4,	ACAAAAAGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAAATTCCAGTGGTA 900
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ò a	961 961	CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTATGGGATTGCGT 1020
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ò	1081	CAGCGAGGTGAGGAAGGGCACGTCGAGGAGGGCAGGCTGCCTTGTTGTTGTTGTTGTTGTTGTTTGT
q	1081	
ò	1141	GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT 1200
qq	1141	GGTCTTGCACCTGCTTCTCAAATTTTGATGTGGCGCTTCCCCACCCGGGAAGGCT 1200
δλ	1201	
Db	1201	GCCGCCACCACCACCACCAACACAGCAATGGCAACACCGACAGCAACCAATCAGATA 1260
δ	1261	261 TAFACAAATGAAATTAGAAGAAACACAGCCTCATGGGACAGAAAITTGAGGGGGGAAC 1320
qq	1261	Tatacaaatgaaattagaagaaacacagccrcatgggacagaaaatttgagggagggaac 1320
λ	1321	AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAGAAATTGAAAATTGCCTTGCAGATA 1380
qa	1321	AAAGAATACTITGGGGGAAAAGAGTITTAAAAAAAAATTGAAATTGCCTTGCAGATA 1380
ò	1381	TITAGGIACAATGGAGITITUCITITCCCAAACGGGAAGAACACAGCACACCCGGCTIGGA 1440
qq	1381	
δ.	1441	CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCAGTGTGGGGGCAAGGGCTCAGCCTC 1500
Ор	1441	ccacrecaaecrecarcerecaecrecretringereceareresecaaeecreaecere
ò	1501	
qq	1501	
ò	1561	
QQ	1561	zaragadadaaadaaargagaccrrccggcccaagcgrgggggggggg
δ	9	AAAAGAGCAAAAAAAA 1
qq	1621	agacifgicaccacogcororororadacoronanananagaconanana 167

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98US-0082804P

98US-0083322P

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98US-0083495P

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22-APR-1998;
22-APR-1998;
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29-APR-1998;
29-APR-1998;
29-APR-1998;
30-APR-1998;
66-MAY-1998;
66-MAY-1998;
     Human, ss, gene, secreted protein, transmembrane protein, PRO, cytostatic, ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary; auditory; tumour growth, retinal disorder; sports-related joint problem; articular cartilage defects; osteoarthritis; rheumatoid arthritis; wound healing; hearing loss.
                                                                                                                                                                                                                                        Human cDNA encoding secreted/transmembrane protein, PRO337
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97US-0066341P
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98US-0077450P
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                                                                                           CACCTICCCCAAAGCTATGGACACAACGTGACGGTCCGGCAGGGGGAGAGGGCCACCCTCAG
                                                                                                                                                                                TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGGGGGTCCTTCTGAGCAACACCCCAAAC
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                       CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG
121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT
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Best Local Similarity 100.0%; Pred. No. 6.7e-05;
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                AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA
                                                                                          TTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAAGAACACAGCACCACCCGGCTTGGA
                                                                                                                                       Human cDNA encoding secreted/transmembrane protein, PRO337
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                                                                                                                                                                                                                                                                                                                                               CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC
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05-MAR-1999; 99US-00254465.
10-MAR-1999; 99W0-US005628.
110-MAR-1999; 99W0-US005628.
110-MAR-1999; 99W0-US0056213.
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14-MAY-1999; 99US-00311832.
14-MAY-1999; 99US-00311832.
14-MAY-1999; 99US-00311832.
15-AUG-1999; 99W0-US01252.
25-AUG-1999; 99W0-US01252.
25-AUG-1999; 99W0-US01252.
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25-AUG-1999; 99W0-US01265.
16-DEC-1999; 99W0-US028651.
02-DEC-1999; 99W0-US028651.
02-DEC-1999; 99W0-US031443.
30-DEC-1999; 99W0-US03133.
02-DEC-1999; 99W0-US03133.
03-DEC-1999; 99W0-US03133.
04-DEC-1999; 99W0-US03133.
05-DEC-1999; 99W0-US03133.
05-DEC-1999; 99W0-US03133.
05-DEC-1999; 99W0-US03133.
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05-DEC-1999; 99W0-US03133.
05-DEC-1999; 99W0-US03133.
05-DEC-2000; 2000W0-US031328.
06-JAN-2000; 2000W0-US031328.
07-MAR-2000; 2000W0-US031328.
08-NWA-2000; 2000W0-US031528.
08-NWA-2000; 2000W0-US031528.
08-NWA-2000; 2000W0-US031528.
09-DEC-2000; 2000W0-US031528.
01-DEC-2000; 2000W0-US031528.
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(GETH) GENENTECH INC.

Ashkenazi AJ, Baker KD, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME; Goddard A, Godweski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton I Stewart TA, Tumas D, Williams PM, Wood WI;

Novel secreted and transmembrane polypeptides and polymucleotides encoding them, useful for treating wound healing, tissue growth and muscle generation and regeneration, amyotrophic lateral sclerosis or neuropathy.

WPI; 2003-596568/56. P-PSDB; ADC66995.

522; 472pp; English 8 E E SEQ Claim 2;

CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC

541

The invention describes an isolated secereted and transmembrane PRO

CC polypeptide (I). PRO polypeptide such as PRO213, PRO700, PRO320 or PRO615

CC is useful in biotechnological and medical research, as well as in various

industrial applications. PRO polypeptide such as PRO300, PRO866, PRO703,

CC PRO600 or PRO846 is useful for therapeutic purposes. PRO9613, pro615, PRO913,

CC PRO500 is useful for the treatment of wound healing, tissue growth and

CC muscle generation and regeneration. PRO313 is useful for treating

amyotrophic lateral sclerosis, neuropathy, AIDS-associated neuropathy or

CC diabetic peripheral neuropathy. A polynucleotide (II) encoding (I) is

CC useful for generating transgenic animals or knockout animals which are

CC useful in the development and screening of therapeutically useful

CC reagents, as probes for generating a pool of sequences for identifying

CC reagents, as probes for generating a pool of sequences for individuals which encodes the PRO and for the genetic analysis of

individuals with genetic disorders, for recombinantly expressing (I) and

CC contromosome identification. (I) is useful as molecular marker for

CR or chromosome identification. (I) is useful as molecular marker for

CR or chromosome identification. (I) is useful as molecular marker for

CR or chromosome identification. (I) is useful as molecular marker for

CR or chromosome identification. (I) is useful as molecular marker for

CR or chromosome identification in diagnostic assay of sample

CC (antagonists). (I) and (II) are useful in diagnostic assay of sample

CC (antagonists). (I) and (II) are useful in diagnostic assay of sample

CC (antagonists). (I) and (II) are useful in diagnostic, assay of sample

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100.0%; Score 1679; DB 1; Length 1679;

Best Local Similarity 100.0%; Pred. No. 6.7e-05;

Matches 1679; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; 61 61 181 181 301 361 421 421 481 121 301 361 481 protein. 88888888888888888888888888888888888 à 셤 8 CC ò 용장 8 & 8 ઠે 8 8 셤 8 6

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Human, ss, gene, secreted protein, transmembrane protein, PRO, cytostatic, ophthalmological, antiarthritic, osteopathic, antirheumatic, vulneary; auditory, tumour growth, retinal disorder, sports-related joint problem; articular cartilage defects, osteoarthritis, rheumatoid arthritis; wound healing, hearing loss.
                                                                           Human cDNA encoding secreted/transmembrane protein, PRO337
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98US-0082804F.
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14-MAY-1999; 99US-0134287P.

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16-JUN-1999; 99WO-US01252.

16-JUN-1999; 99US-0139557P.

26-JUL-1999; 99US-0145698P.

26-JUL-1999; 99US-0145698P.

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25-AUG-1999; 99US-01380142.

25-AUG-1999; 99US-0180137.

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25-AUG-1999; 99WO-US028551.

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25-AUG-1999; 99WO-US028551.

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26-JUN-2000; 99WO-US01243.

26-JUN-2000; 2000WO-US00129.

26-JUN-2000; 2000WO-US00129.

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28-MAX-2000; 2000WO-US012564.

29-JUN-2001; 2001WO-US01256.

21-JUN-2001; 2001WO-US01266.

21-JUN-2001; 2001WO-US01266.

21-JUN-2001; 2001WO-US01266.

21-JUN-2001; 2001WS-0US0126.

22-JUN-2001; 2001WS-0US0126.

23-JUN-2001; 2001WS-0U (GETH) GENENTECH INC. ö

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Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;

Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;

9 9 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGGAAT 180

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98US-0079786P.
98US-0079923P.
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98US-0080105P.
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11-SEP-1998; 98US-010038P.

20-NOV-1998; 98US-0100304P.

20-NOV-1998; 98US-0109304P.

22-DEC-1998; 98US-0109304P.

23-DEC-1998; 98US-0113226P.

23-DEC-1998; 98US-0113226P.

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25-APR-1999; 99US-0130212P.

25-APR-1999; 99US-0130232P.

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26-APR-1999; 99US-0130232P.

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22-APR-1999; 99US-0130232P.

23-NOV-1999; 99US-0130232P.

24-MAY-1999; 99US-0130232P.

25-APR-1999; 99US-0130232P.

26-APR-1999; 99US-0130232P.

26-APR-2000; 2000WO-US002319.

26-APR-2000; 2000WO-US0031308.

26-APR-2000; 2000WO-US001370S.

27-MAR-2000; 2000WO-US01370S.

27-MAR-2000; 2000WO-
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GENENTECH INC. (GETH) Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Kljavin IJ, Kuo SS, Napler MA, Pan J, Paoni NF, Roy MA, Shelton Stewart TA, Tumas D, Williams PM, Wood WI;

DĽ;

WPI; 2003-695924/66. P-PSDB; ADC63179.

New isolated secreted and transmembrane PRO polypeptides, useful in the preparation of a medicament for treating a condition responsive to the polypeptide, and as therapeutic agents e.g. vaccines.

Claim 2; SEQ ID NO 522; 467pp; English.

The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity to an amino acid sequence chosen from 94 fully defined sequences as given in the specification (including PRO lacking its associated signal

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ptide, a PRO extracellular domain with or withoubtide). Also included are nucleic acids encoding trioned above, a vector comprising a PRO nucleic marsting the vector and producing PRO, a chimaer of used to a heterologous amino acid sequence, a libody. PRO337 polypeptide is useful for detectilypeptide in a sample suspected of containing PR hilarly, PRO4993 polypeptide is useful for detectilypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detectilypeptide. PRO739. PRO4993 polypeptide is useful for detectiles propertide, and PRO1559 polypeptide is useful example active molecule to a cell expressing PRO337 polybeptide is us active molecule to a cell expressing PRO337 polybeptide is the toxin, radiolabel, or an antibody.	Ouery Match Best Local Similarity 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Constructive 0; Mismatches 0; Indels 0; Gaps 0; OY 1	121 AAGAAAAAATCATGAAAACCATCCAGCCAAAATGCACAATTCTTTGGGCAAT 180	361 GEGCACTATTGACAACCGGGTCACCGGGTGGCCTAAACCGCAGCACCCTAA 361 TGCTGGGAATGACAACCGGGTCACCGGGTGGTCCTTCTGAGCAACCCCAAC 361 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGGTGGTCCTTCTGAGCAACACCCAAAC 421 GCTGGGAATGACAAGTGGTGCTGGATGTTTGAGCGAGCCCTTCTGAGCAACCCAAAC 421 GCTGACAACACCACCAAACTGGATGTTTGAGCGAGGCCCTTACACCTGCTC 421 GCTGACAACACCACCAAACACCTCTAGGGTCCACTTGTGCAAGTATCTCC 481 GGTGCAGACACACCCCCAAAGACCTCTAGGGTCCACTTGTGCAAGTATCTCC 481 GGTGCAGACAACACCACCCCAAAGACCTCTAGGGTCCACTTGTGCAAGTATCTCC 541 CAAAATTGTAGAAGATTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 541 CAAAATTGTAGAAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCACCTCACCCCACCCCACCCCCCCC	0.0 CTGCATAGCAACTGGTAGACCTAGGGTTACTTGGAGACACTCTCCCCAAAGC 660
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                 Homo sapiens
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Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
Tumas D, Williams PM, Wood WI;
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01-DEC-2000; 2000MO-US032678.
20-DEC-2000; 2000MO-US034956.
22-MAR-2001; 2001MO-US006520.
22-MAR-2001; 2001MO-US009552.
01-JUN-2001; 2001MO-US01902.
01-JUN-2001; 2001MO-US019692.
20-JUN-2001; 2001MO-US019692.
09-JUL-2001; 2001WO-US01195.
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Filvaroff E,
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28-APR-1999;
14-MAY-1999;
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                                                                                                                     Human, ss, gene, secreted protein, transmembrane protein, PRO; cytostatic, ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnearry; auditory; tumour growth; retinal disorder; sports-related joint problem; articular cartilage defects; osteoarthritis; rheumatoid arthritis; wound healing; hearing loss.
                                                                            TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA
                                                           GTCCATAGAGGACGAAATGAGACCTTCCGGCCCCAAGCGTGGCGCTGCGGGCACTTTG
                                                                                                                                                                                                                                                                                                                     Human cDNA encoding secreted/transmembrane protein, PRO337.
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ansmembrane PRO polypeptides, useful in the r treating a condition responsive to the c agents e.g. vaccines.

English.

The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity to an amino acid sequence chosen from 94 fully defined sequence as given in the specification (including PRO lacking its associated signal peptide, Also included are nucleic acids encoding the PRO proteins mentioned above, a vector comprising a PRO nucleic acids encoding the PRO proteins comprising the vector and producing PRO, a chimaeric molecule comprising PRO fused to a heterologous amino acid sequence, and an anti-PRO antibody. PRO337 polypeptide is useful for detecting a PRO4993 polypeptide.

ö Gaps ö Query Match

100.0%; Score 1679; DB 1; Length 1679;

Best Local Similarity 100.0%; Pred. No. 6.7e-05;

Matches 1679; Conservative 0; Mismatches 0; Indels 0;

È	H	GITGIGICCTICAGCAAACAGTGGGTTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 60
q _O	1	GIGICCTTCAGCAAAACAGTGATTTAAATCTCCTTGCACAAGCTTGAGGAGCAACA
ķ	61	CTAT
ΩÞ	61	JAGGAAAGAAAGAAAAAAAACGAACCT
È		AAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT 18
අධ	121	AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 180
Š.		24
Q C	œ	CACGGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC 24
٠ ک څ	241	CACCTTCCCCAAAGCTATGGACAACGTGACGGTCGGCAGGGGGAGGGGGAGGGCCACCCTCAG 300
3 .		
සු දු	301	GTGCATATTCACAACCGGGTCACCGGGTGGCTGGCTAACCGCAGCACCATCTTTA 360 GTGCACTATTCACAACCGGGTCACCCGGGTGGCTTAAACCGCAGCACCATCTTTA 360 GTGCACTATTCACAACGGGTCACCGGGTGGCTTAAACGGCAGACACCATCCTTA 360
ŏ	361	TICOGAATGACAAGTGGTGGTGGATCCTCGGGTGGTCCTTCTGAGCAACACCCAAAC 42
qq	361	
Š	421	SATGIGIAIGACGAGGCCCTIACACCTGCTC 48
qq	421	cagracadcarceadaacerdearererareadaadecerracacereer
ò	481	GGTGCAGACAGCCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 540
qq	481	SCAAGTATCTCC 54
ò	541	DATTAGCCTCAC 60
, q ₀	541	FATTAGCCTCAC 60
ζ	601	CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 660
QQ	601	CTCTCCCAAAGC 66
λo	661	CCGGGAGCAGTC 72
Db	661	7
ò	721	AGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGTAAA 780
ΩÞ	721	AGGGGACTACGAGTGCCTCCAATGACGTGGCCCCGTGGTACGGAGAAA 780
δ	781	84
QQ	781	
Š	841	ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 900
Db	841	- A
ò	901	CAAGGATGACAAAAGACTGATTGAAGGAAAAGAAAGGGGTGAAAAGTGGAAAACAGACCTTT 960
ΩÞ	901	CAAGGATGACAAAAGACTGATTGAAGGAAAGGAAAGGGGTGAAAGTGGAAAACAGACTTT 960
à	961	CGT 102
qq	961	102
ò	1021	GGCCTCCAACAAGCTGGGCCACCAATGCCAGCATGCTATTTGGTCCAGGCGCCGT 1080
q _O	1021	CTCCAACAAGCTGGGCCACCAATGCCAGCATCATGCTATTTGGTCCAGGGGCCGT 1

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111-MAR-1998;
112-MAR-1998;
12-MAR-1998;
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37-MAR-1998;
37-MAR-1998;
31-MAR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          vulnerary; virucide; neuroprotective; cytostatic; gene therapy; tumour cell proliferation inhibitor; secreted and transmembrane protein; PRO; viral infection; wound healing; tissue growth; muscle generation; muscle regeneration; tissue growth; muscle generation; muscle regeneration; amyotrophic lateral sclerosis; neuropathy; AIDS associated neuropathy; diabetic peripheral neuropathy; chromosome identification; antagonist; tissue typing; immunohistochemical staining; gene; ss.
                                                                                            TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA
  CAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGTCTTCT
                                              GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGGAAAGGCT
                                                             1141 GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT
                                                                                                                                                         AAAGAATACTTTGGGGGAAAAGAGTTTTAAAAAAAAAATTGAAAATTGCCTTGCAGATA
                      Human cDNA encoding secreted/transmembrane protein, PRO337.
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97US-0064249P.
97US-0065311P.
97US-0077450P.
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22-MAY-1998; 98US-0086722P.
22-MAY-1998; 98US-008632P.
22-MAY-1998; 98US-008632P.
22-MAY-1998; 98US-0086430P.
22-MAY-1998; 98US-008643P.
22-MAY-1998; 98US-010033P.
23-MAY-1999; 98US-0100318P.
24-MAR-1999; 98US-0100314F.
25-MAY-1999; 98US-0100314F.
26-JUN-1999; 98US-0100314F.
27-MAY-1999; 98US-0100314F.
28-MAY-1999; 98US-0100314F.
28-MAY-1999; 98US-0100314F.
28-MAY-1999; 98US-0100318P.
28-MAY-1999; 98US-0100318P.
28-MAY-1999; 99US-013022P.
28-MAY-1999; 99US-013022P.
28-MAY-1999; 99US-013023P.
28-MAY-2000; 2000WO-US0031274.
28-MAY-2000; 2000WO-US00313P.
28-MAY-2000; 2000WO-US00319.
28-MAY-2000; 2000WO-US00319.
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The invention describes an isolated secereted and transmembrane PRO polypeptide (I). PRO polypeptide such as PRO213, PRO700, PRO320 or PRO615 is useful in biotechnological and medical research, as well as in various industrial applications. PRO polypeptide such as PRO300, PRO666, PRO703, PRO608, PRO310, PRO615, PRO615, PRO618, PRO7010, PRO666 or PRO616 is useful for therapeutic purposes. PRO6163 is useful therapeutically in vivo for lessening the effects of viral infection. PRO200 is useful for the treatment of wound healing, tissue growth and muscle generation and regeneration. PRO337 is useful for treating | TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC 420 480 540 540 600 Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL; Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME; Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL; Stewart TA, Tumas D, Williams PM, Wood WI; Novel isolated secreted and transmembrane PRO polypeptides, useful in the preparation of a medicament for treating a condition responsive to the polypeptide, and as therapeutic agents e.g. vaccines. 240 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCCGGCAGGGGGGAGAGCGCCACCCTCAG 300 361 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC 420 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 480 99 99 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAGGCTTGAGGCAACAC 60 421 GCAGTACAGCATCGAGAACGTGGAAGTGTATGACGAGGGCCCTTACACCTGCTC 181 CTTCACGGGGCTGGCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGGAGGTGCCGTGCGGGAGATGC
181 CTTCACGGGGCTGGCTGCTCTGTGTCTTTCCAAGGAGTGCCCGTGCGCGCGGAGATGC Query Match
100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; Gaps Claim 2; SEQ ID NO 522; 464pp; English. WPI; 2003-743810/70. P-PSDB; ADC67619. н Н 301 301 361 421 601 601 ò 임 셤 임 유 à 임 à ద ઠ ઠે g ઠ ď ò g õ 셤 ઠે 8 셤

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1140 1440 1440 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCCTGGGGGCACTTTG 1620 1140 1200 1200 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCCAGTGGGGCAAGGGCTCAGCCTC 1500 TCTGCCCACACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAATTCAATCA 1560 1020 1020 1080 1080 GCCGCCACCACCACCAACACAACAGCAATGGCAACACCGACAGCAACCAATCAGATA 1260 GCGGCCACCACCACCACCAACACAACAGCAATGGCAACACCCAACAACAACAACAATAA 1260 840 GTAGACTGTGCCACCACCACGGCGTGTGTGTAAAACGTGAAATAAAAGAGCAAAAAAA 1679 720 780 780 840 900 900 960 960 720 ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA GGICTIGGACCIGCTICTCAAATTTTGATGTGAGTGCCACTTCCCCCCCGGGAAGGCT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGCATCACCCGGGAGCAGC AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTAAA AGGGGGCCCTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCCGTGGTACGGAGAGTAAA CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAAAGGGGTGAAAGTGGAAAACAGACCTTT GGTTGGCTTTGTGAGGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 841 1021 1081 1141 1201 1261 1261 1321 1381 1381 1441 1441 1501 1501 1561 1561 1621 1021 1081 1141 1201 1321 1621 199 781 841 901 901 961 196 721 781 661 721 8 6 8 8 8 දු දු 8 8 ठे 8 6 8 8 B 8 र्व क्षे 8 & 8 8 8 8

ADC62554 standard; cDNA; 1679 RESULT 34 ADC62554 ID ADC62 XX

Human, ss, gene, secreted protein; transmembrane protein; PRO; cytostatic; ophthalmological; antiarthritic; osteopathic; antirheumatic; valnerary; auditory; tumour growth; retinal disorder; sports-related joint problem; articular cartilage defects; osteoarthritis; rheumatoid arthritis; wound healing; hearing loss. Human cDNA encoding secreted/transmembrane protein, PRO337 970S-0064249P.
970S-0064349P.
970S-0066364P.
970S-0066364P.
980S-00774312P.
980S-00776431P.
980S-00776431P.
980S-0077643P.
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980S-007899P.
980S-0078939P.
980S-0079788P.
980S-007928P.
980S-007933P.
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980S-0080333P.
980S-0081879P.
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980S-0081879P.
980S-0081873P. 2001US-00978193 (first entry) JS2003073624-A1. 117-OCT-1997;
03-NOV-1997;
13-NOV-1997;
110-MAR-1998;
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111-MAR-1998;
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32-APR-1998; 27-APR-1998; 28-APR-1998; 29-APR-1998; 29-APR-1998; Homo sapiens 15-OCT-2001; 18-DEC-2003 17-APR-2003

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98US-0083499P

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98US-0083545P

98US-0083554F

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28-JUL-1999; 99US-0146222P.
25-AUG-1999; 99US-00380137.
25-AUG-1999; 99US-00380142.
29-OCT-1999; 99US-0162865P.
30-DEC-1999; 99WO-US028513.
02-DEC-1999; 99WO-US028551.
02-DEC-1999; 99WO-US028655.
16-DEC-1999; 99WO-US028655.
16-DEC-1999; 99WO-US028655.
16-DEC-1999; 99WO-US028655.
16-DEC-1999; 99WO-US028657.
16-DEC-1999; 99WO-US028657.
16-DEC-1999; 99WO-US031243.
30-DEC-1999; 99WO-US031243.
30-DEC-1999; 99WO-US031243.
310-DEC-1999; 99WO-US031243.
310-DEC-2000; 2000WO-US0314956.
310-MAY-2001; 2000WO-US03124956.
310-MAY-2001; 2000WO-US03124956.
32-MAY-2001; 2001WO-US03124956.
32-MAY-2001; 2001WO-US03124956.
32-MAY-2001; 2001WO-US0312800.
32-MAY-2001; 2001WO-US0312800.
32-MAY-2001; 2001WO-US0312692.
33-MAY-2001; 2001WO-US0312800.
33-MAY-2001; 2001WO-US0313800.
33-MAY-2001; 2001WO-US0313800.
33-MAY-2001; 2001WO-US0313800.
33-MAY-2001; 2001WO-US0313800.
33-MAY-2001; 2001WO-US0313800.
33-MAY-2001; 2001WO-US0313800.
33-MAY-2001; 2001WO-US031800.
33-MAY-2001; 2001WO-US031800. (GETH) GENENTECH INC \$\frac{1}{2}\$\frac

Gaps . 0 Length 1679 Indels Query Match
100.0%; Score 1679; DB 1;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0;

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1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560
                                                                                                                                                                                                                                         GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTG 1620
                                                                                                                                                                                                                                                                       1561 Grccaragagacgaacagaargagaccrrccggcccaagcgrgcgcgcrgcgggggagrrrg 1620
                                                                                                                                                                                                                                                                                                                           1621 GTAGACTGTGCCACCACCACGGCGTGTGTTGTGAAACGTGAAATAAAAAGGGAAAAAAA 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polynucleotides encoding them. The PRO polypeptides and polynucleotides are useful as pharmaceuticals, diagnostics, blosensors or bioreactors. They are particularly useful for detecting tumours (e.g. lung tumour, colon tumour, breast tumour, prostate tumour, rectal tumour or liver tumour) in a mammal, for stimulating the release of tumour necrosis factor (TNF)-alpha from human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human, PRO; gene, ss; secreted polypeptide, transmembrane polypeptide, tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic.
                                                                    TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA
          AAAGAATACTTTGGGGGGAAAAGGGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA
                                                                                                            1441 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC
                                                                                                                                         1441 cccacrecaaecrecarcerecaaccrerrresreceaereresecaaeeereaecre
                                           TITAGGTACAATGGAGTITITCTTTTCCCAAACGGGAAGAACACACACACCCGGCTTGGA
                                                                                                                                                                                                                                                                                                        Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephan JF, Watanabe CK, Wood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    One hundred and twenty two nucleic acids encoding PRO polypeptides, useful in gene therapy, or for preparing a medicament for treating
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29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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Grimaldi JC, Gurney
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blood, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells or for stimulating the proliferation of conversal pericyte cells or for stimulating the proliferation of normal human dermal fibroblasts. The PRO nucleic acids are useful as hybridisation probes, in chromosome and gene mapping, in generating transgenic animals or knock-out animals which technology, in generating transgenic animals or knock-out animals which reagents, in gene therapy, in chromosome identification, as chromosome continuous and in generating probes. The PRO polypeptides, or anti-PRO cartibodies, are useful for preparing a medicament for treating a condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and bone and/or cartilage disorders (e.g. arthritis, sports injuries), involving inducing the re-disorders (e.g. arthritis, sports injuries), involving inducing the re-differentiation of chondrocytes. The PRO polypeptides are useful as condition markers for protein electrophoresis, and in tissue typing. This sequence represents a human PRO polymucleotide of the invention.
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Sequence 1679 BP: 498 A: 432 C: 419 G: 330 T: 0 U: 0 Other

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ò a	961 09	CCTCTCAAAACTCATCTTCTAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT 1020
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පි පි	1081	CACCACCTGACGACGCACGTCGACGACGACGACGCTGCCTCTCCTCTTCT 1140
& B	1141 GG	GGTCTTGCACCTGCTTCTCAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT 1200
ò	1201 GG	CGCCACCACCACCACCACACACAATGCAACACGGACAGCAACAGCAATCAGATA 1260
đ	1201 GG	
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පි පි	1321 AP	aaagaatactttgggggaaaagggttttaaaaagaaattgaaattgccttgcgggata 1380
ò	1381 TT	TITAGGTACAATGGAGTITICTITICCCAAACGGGAAGACACAGCACACCCGGCTIGGA 1440
qq	1381 TT	Thagstachardsagititicititiccahacgsahadadadadachcccgschigsa 1440
රි ර		CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGAAGGGCTCAGCCTC 1500
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8 G	1501 TG	TCTGCCCAAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCAATTCAATCA 1560 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560
ò	1561 GT	GTCCATAGAGACGGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCGCTGCGGCACTTTG 1620
qq	1561 GT	ICCATAGAGACGAACGAATGAGACCTTCCGGCCCAAGCGTGGCGTGCGGGCACTTTG 1620
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쉽	1621 GT	TAGACTGTGCCACCACGGCGTGTGTTGTGAAACGTGAAATAAAAAGAGCAAAAAAA 1679
RESULT ADC4218	MLT 36 2187 ADC42187 AF	andard. onNA. 1679 PD
XX SX SX	C42187;	
文目:	-DEC-200	3 (first entry)
¥ 8	Human cDNA	encoding secreted/transmembrane protein, PRO337.

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29-APR-1998;
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23-DEC-1998;
05-JAN-1999;
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               Human; ss; gene; secreted protein; transmembrane protein; PRO; cytostatic; ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary; auditory; tumour growth; retinal disorder; spotts-related joint problem; articular cartilage defects; osteoarthritis; rheumatoid arthritis; wound healing; hearing loss.
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97US - 00654449P

98US - 0077441P

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98US - 0082704P

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98US-0026448.

990S-0145698P. 990S-0146222P. 990S-00380137. 990S-00380138. 990S-00380142.

301 GIGCACTATTGACAACCGGGTCGCCCGGCTGGCCTGGCTAAACCGCGACCACCACTCTCTA 3	361 IGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC				601 CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC (661 GGTIGGCTITIGIGAGIGAAGACGAATACTIGGAAATTCAGGCGTCACCCGGGAGCAGTC 7	721 AGGGACTACGAGTGCACCTCCAATGACGTGGCGCGCCCGTGGTACGGAGAGTAAA 7 	781 GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 8	841 ACAAAAGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGATTCCAGTGGTA 5	901 CAAGGATGACAAAGACTGATTGAAGGAAAGAGGGGTGAAAGTGGAAAACAGACTTT 9 	961 CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT 1 	1021 GGCCTCCAACAAGCTGGGCCACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT 1				1261 TATACAAATGAAATTAGAAGAAACACAGCCTCATGGGACAGAAATTTGAGGGAGG	1321 AAAGAATACTTTGGGGGAAAAGAGTTTTAAAAAGAAATTGAAAATTGCCTTGCAGATA 1 	1381 ITTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACACAC
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29-OCT-1999; 30-NOV-1999;	02-DEC-1999; 02-DEC-1999; 16-DEC-1999; 30-DEC-1999;	30-DEC-1999; 05-JAN-2000; 06-JAN-2000; 06-JAN-2000;	11-FEB-2000; 18-FEB-2000; 24-FEB-2000; 02-MAR-2000;	10-MAR-2000; 21-MAR-2000; 30-MAR-2000; 17-MAY-2000;	22-MAY-2000; 30-MAY-2000; 02-JUN-2000; 28-JUL-2000;	24-AUG-Z000; 08-NOV-Z000; 27-NOV-Z000; 01-DEC-Z000;	20-DEC-2000; 20-DEC-2000; 28-FEB-2001; 22-MAR-2001;	22-MAR-2001; 22-MAR-2001; 10-MAY-2001; 10-MAY-2001;	25-MAY-2001; 01-JUN-2001; 01-JUN-2001; 05-JUN-2001;	14-JUN-2001; 19-JUN-2001; 20-JUN-2001; 29-JUN-2001;	0-JUL-2001; GETH) GENE	n Query Match Best Local Simi Matches 1679: (1 GITC 	61 AATC 61 AATC	121 AAG	181 CTTC 181 CTTC		241 CACC 301 GTGC
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 TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACACAGCACCCCGGCTTGGA 1440
                                                                                                                                  Human, PRO, gene, se, secreted polypeptide; transmembrane polypeptide; tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic.
                   CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGGGGCAAGGGCTCAGCCTC
                                                                                                                                                                                                     ADC21844 standard; cDNA; 1679 BP
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20-JUN-2000; 2000US-0219801P.
22-JUN-2000; 2000US-0219801P.
25-JUL-2000; 2000US-0219801P.
25-JUL-2000; 2000US-0220688P.
25-JUL-2000; 2000US-022088P.
25-JUL-2000; 2000US-022088P.
25-JUL-2000; 2000US-022088P.
25-JUL-2000; 2000US-022088P.
25-JUL-2000; 2000US-022088P.
26-JUC-2000; 2000US-0208873.
26-DEC-2000; 2000WO-US0328678.
26-DEC-2000; 2000WO-US0328678.
26-DEC-2000; 2000WO-US034856.
25-MAY-2001; 2001WO-US017800.
                                                                                                                                                                                                                                                          Human PRO polynucleotide #63.
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2002US-00119480.
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The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polymerotides encoding them.

Cransmembrane polypeptides and the PRO polymucleotides encoding them. diagnostics, biosensors or bioreactors. They are particularly useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for detecting tumour, rectal tumour or liver tumour) in a mammal, for stimulating the proliferation or differentiation of themolating the proliferation of or gene capression in pericyte cells, for stimulating the proliferation of or gene expression in pericyte cells or for stimulating the proliferation of corganic probes, in chromosome and gene mapping, in generating antisense RNA and DNA, in preparing PRO polypeptides by recombinant tehnology, in generating transgenic animals or knock-out animals which reagents, in gene therapy, in chromosome identification, as chromosome condition which is responsive to the PRO polypeptides, or anti-PRO antibodies, and as pericyte-associated tumours and bone and/or cartilage condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and bone and/or cartilage disorders (e.g. arthritis, sports injuries), involving inducing the recombinant condition which is responsive to the PRO polypeptides are useful as disorders (e.g. arthritis, sports injuries), involving inducing the rectal disorders (e.g. arthritis, sports injuries), involving inducing the rectal disorders (e.g. arthritis, sports injuries), involving inducing the rectal disorders (e.g. arthritis, sports injuries), involving inducing the rectal disorders (e.g. arthritis, sports injuries), involving inducing the rectal disorders (e.g. arthritis, sports injuries), involving inducing the rectal disorders (e.g. arthritis, sports injuries), involving inducing the rectal disorders (e.g. arthritis, sports injuries), involving inducing the rectal differentiation of chondrocytes and the properties of the properties of the in
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                                                                                                                                                                                                                                                              Novel isolated PRO polypeptide useful for tissue typing, as molecular weight markers in protein electrophoresis, for treating arthritis, tumor.
Godowski PJ;
مد Wood WI;
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                                Gerritsen ME, Goddard A, Godowski P
Smith V, Stephan JF, Watanabe CK,
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                                    Desnoyers L,
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Best Local Similarity
Matches 1679; Conserv
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                                    Baker KP, De
Grimaldi JC,
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(GETH ) GENENTECH INC
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                     GGTGCAGACAGACAACCCCCAAAGACCTCTAGGGTCCACCTCATGTGCAAGTATCTCC
                                           CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC
                                                     CAAAATTGTAGAGATTTCTTCAGATATCTCCCATTAATGAAGGGAACAATATTAGCCTCAC
                                                                             CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC
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cc antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for simulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of glucose or PRA (free fatty acid by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proceoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage are useful for treating various shallon may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypucle of the invention. Note: The sequence date for this patent is also available in cell contronic format from USPTO at sequence. Topologov/sequence. The sequence of the sequence. 888888888888888888888888888888

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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ADC71963 ID ADC71963 standard; cDNA; 1679 RESULT 39

ADC71963;

18-DEC-2003 (first entry)

Novel human secreted and transmembrane protein PRO337 cDNA.

Human, secreted and transmembrane protein, PRO, secreted polypeptide, transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte, tumour; cancer, adrenal; lung; calon; breast; prostate, rectum, kidney; cervix; liver; microvascular endothelial cell; glucose uptake modulator; microvascular endothelial cell; periodice uptake modulator; FRA uptake modulator; cell proliferation; periotyce cell; innor ear utricular supporting cell; Tymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; otteoarthritis; rheumatical arthritis; maemoglobin-associated disorder; thalassaemia; immune system cell infiltration; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker; gene; ss.

Homo sapiens.

US2003092107-A1.

15-MAY-2003.

24-APR-2002; 2002US-00131828

x 07-OCT-1998; 98US-0103315P. x 01-SEP-1999; 99WO-0103297. 16-OCT-1999; 99US-00403297. x 18-FEB-2000; 2000WO-US004342. x 10-NOV-2000; 2000WO-US030873. x 01-DEC-2000; 2000WO-US0302678.

(GETH) GENENTECH INC

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W; Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-801172/75. P-PSDB; ADC71964. New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or cancer.

Claim 2; Fig 375; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymuclectides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful caseful in the development and screening of therapeutically useful medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of plucose or FFA (free fatty acid) by skeletal muscle cells or adipocyte cells, for stimulating differential call muscle cells, for stimulating proliferation of or gene expression in pericyte cells, for

stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage defects, ostoarchitis and rheumatoid arthritis. ARO polypeptides are useful for treating sports-related joint problems, articular cartilage defects, ostoarchitis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polymucleotide of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at seqdata.uspto.gov/sequence.html. 300 300 360 420 420 480 480 540 540 900 009 099 099 720 720 780 780 840 120 180 240 GIGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 360 9 9 1 GITGIGICCTICAGCAAAACAGIGGATITTAAAICTCCTIGCACAAGCTIGAGAACAACA GTTGTGTCCTTCAGCAAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGAGCGCCACCCTCAG GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCCGCAGGGGGGAGAGAGCGCCACCCTCAG TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAAAC GTGCAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATTCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC AGGGGACTACGAGTGCCTCCAATGACGTGGCCGCCCCGTGGTACGGAGAGTAAA GTGCACTATTGACAACCGGGTGACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA gcaeracacerceagarccagaacercearererareaceaegecerracacere GGTGCAGACAGACCACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT CTTCACGGGGCTGCTCTGTGTCTTCCCAAGGAGTGCCCCGTGCGCAGCGGAGATGC GCAGTACAGCATCGAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC Gaps · 0 Length 1679; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Indels Query Match 100.0%; Score 1679; DB 1; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; н 181 241 301 301 361 361 421 421 481 481 541 541 601 601 661 661 721 781 g 셤 ò ď ద à 원 ò g a 8888888888888888 ò ద ð d ò 엄 ò 셤 ઠે ద ઠે 셤 ò ò ò

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BP. ADC59942 standard; cDNA; 1679 (first entry) ADC59942; ADC59942
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Novel human secreted and transmembrane protein PRO337 cDNA

Human, secreted and transmembrane protein, PRO, secreted polypeptide, transmembrane polypeptide, tumour necrosis factor-alpha; TNP-alpha, chondrocyte; tumour, cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell;

glucose uptake modulator; FPA uptake modulator; cell proliferation; cell differentiation; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; haemoglobin-ssociated disorder; thalassaemia; immune system cell infiltration; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker; gene; ss.

Homo sapiens.

JS2003092105-A1.

15-MAY-2003.

24-APR-2002; 2002US-00131821

09-DEC-1999; 99US-0170262P. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Filvaroff E, Gao aL, Sherwood S; Deforge L, Desnoyers L, Filvaroff E, A, Godowski PJ, Gurney AL, Sherwood S Tumas D, Watanabe CK, Wood WI, Zhang Goddard Gerritsen ME, Goddard Smith V, Stewart TA, Beresini M, Baker KP,

WPI; 2003-801170/75. P-PSDB; ADC59943. New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or cancer

Claim 2; Fig 375; 637pp; English

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the persence of a tumour in a mammal (e.g. adremal, lung, certoral and invertumours). The detecting the presence of a tumour in a mammal (e.g. adremal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polyuncleotides are useful in molecular biology including uses as thy bridisation probes, in chromosome and gene mapping, in generating of physicians by recombinant techniques and in colon probes in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful so the propagation of thuman microvascular endothelial cells, for modulating the uptake of a condition responsive to the polypeptides or antibodies are used in preparing of thuman microvascular endothelial cells, for modulating the uptake of glucose or FRA (free fatty acid) by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating orbiferation of inner ear utricular supporting cells or stimulating orbiferation of inner ear utricular supports. Constitution and for stimulating various bone and/or cartilage defects, osteoarthritis and rheumatoid cummanian haemoglobin-associated disorders such as various themmanian propertion. This sequence represents a human FRO polympude cells for infiltration. T

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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100.0%; Score 1679; DB 1; Length 1679; 9; Conservative 0; Mismatches 0; Indels 0; Gaps GTTGTGTCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACA GTTGTGTCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACA GATGTGTCCTTCAGCAAAAAAAAAA	121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATCTATCT	181 CTTCACGGGCTGCTCTGTGTCTCTTCCAAGAGTGCCCGTGCGCAGAGATGC 240	241 CACCTTCCCCAAAGCTATGGACAACGTGACGGCCGCAGGGGGAGAGCGCCACCCTCAG 300	301 GTGCACTATTGACAACCGGGTCACCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 360 	TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC	421 GCAGTACAGCATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 480 	GGTGCAGACAGACACCAAAGACCTCTAGGGTCCACCTCATTGTGCAGTATCTCCCCATTGTTGTGCAGTATCTCCCCATTGTTGTGCAGTATCTCCCAGTGCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC	541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGAACAATATTAGCCTCAC 600 	601 CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 660 	661 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 720 [121 AGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGGCCCGTGGTAA 780	GGTCACCGTGAACTATCCACATACATTTCAGAAGCCAAGGGTACAGGTGTCCCGGTGGG	841 ACAAAAGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 900 	901 CAAGGATGACAAAAGACTGATTGAAGGAAAAGAAAGGGGTGAAAGTGGAAAACAGACCTTT 960 	61 CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACGCTTGCGT	

us-10-017-084a-522.rng

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New secreted and transmembrane PRO polypeptide useful for preparing medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g. cancer.
                                                                                                  Claim 2, SEQ ID NO 125, 314pp; English.
01-JUN-2001; 2001WO-US017800.
29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
                                     Desnoyers L,
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                        (GETH ) GENENTECH INC.
                                                      WPI; 2003-801154/75.
P-PSDB; ADC49876.
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Grimaldi JC,
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61 AATCTATCAGGAAAGAAAGAAAGAAAAAAACCGAACCTGACAAAAAAGAAGAAAAAAGAAG 9 9 61 AATCTATCAGGAAAGAAAGAAAAAAAAACCGAACCTGACAAAAAAGAAG GTTGTGTCCTTCAGCAAAACAGTGGATTTTAAATCTCCTTGCACAGCTTGAGAGCGAACAC ô Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; GITGIGICCIICAGCAAAACAGIGGAITIAAAICICCIIGCACAAGCII

CTTCACGGGGCTGGCTCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC 240

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Co polypeptide (I). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are

Co useful for stimulating the pro11feration of or gene expression in

Co pericyte cells. PRO357, PRO229, PRO1272 or PRO4405 polypeptide are useful

Co to stimulating the pro11feration or differentiation of chondrocyte

Co cells. PRO311, PRO125, PRO1255, PRO1160 or PRO1419 polypeptide

are useful for stimulating the release of tumour necrosis factor (TMF)
alpha from human blood. PRO982, PRO357, PRO126, PRO1419, PRO214,

PRO1478, PRO1314, PRO826, PRO363, PRO357, PRO126, PRO1419, PRO14108,

CO PRO1478, PRO1181, PRO1126, PRO1186, PRO1183, PRO840, PRO1080,

CO PRO1478, PRO1347, PRO1357, PRO1359, PRO1274, PRO1374,

PRO1343, PRO1328, PRO4341, PRO1801, PRO4331, PRO1274, PRO1376, PRO1367,

CO PRO14867, PRO5075, PRO1367, PRO1096, PRO1414, PRO1376, PRO4322,

CO PRO14867, PRO5075, PRO7184, OR PRO1486, PRO432, PRO432,

CO PRO1887, PRO5075, PRO7184, PRO1801, PRO4331, PRO4381, PRO432,

CO PRO5086, PRO5085, PRO7154, OR PRO7425 polypeptide are useful for

CO Stimulating the pro11feration of normal human dermal fibroblast cells.

CO PRO5086, PRO5085, PRO7154, OR PRO7425 polypeptide are useful for

CO Inhibiting the pro11feration of normal human dermal fibroblast cells.

CO PRO5086, PRO5085, PRO7154, OR PRO7425 polypeptide are useful for

CO Inhibiting the pro11feration of normal human dermal fibroblast cells.

CO PRO5086, PRO5085, PRO7154, OR PRO7425 polypeptide are useful for

CO Inhibiting the pro11feration of normal human dermal fibroblast cells.

CO PRO5086, PRO50866, PRO5086, PRO5086, PRO5086, PRO5086, PRO5086, PRO5086, PRO50866, PRO5086, PRO5086 rumour, colon tumour, breast tumour, prostate tumour, rectal tumour or liver tumour. (1) is useful as molecular weight markers, for tissue typing, or as therapeutic agents. A polynucleotide (II) encoding (I) is useful for chromosome and gene mapping or gene therapy. (II) is useful for generating transpenic animals or knock-out animals which are useful screening useful reagents. PRO357, PRO259, PRO1272 or PRO405 polyneptide is useful for treating bone and/or cartilage disorders (e.g., arthritis, sport injuries). This sequence encodes a human secreted and transmembrane 120 180 180 Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI; AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT AAGAAAAAAATCATGAAAACCATCCAGCCAAAATGCACAATTCTATCTTTTTTGGGCAAT æ

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1381 TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACAGGCACACCCGGCTTGGA 1440
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                                                                                                                                                                                                                                                                                                                                                           CCCACTGCAAGCTGCAACGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC 1500
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useful
                                                            AAAGAATACTTTGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA
                                                                                                              AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAATTGCCTTGCAGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human; secreted and transmembrane protein; PRO; gene; ss; cytostatic; vulnerary; antiarthritic; pericyte cell proliferation; pericyte cell differentiation; chondrocyte cell differentiation; tumour necrosis factor alpha release (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour; lung tumour colon tumour; brostate tumour; rectal tumour; lissue typing; chromosome mapping; gene mapping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephan JF, Watanabe CK, Wood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New PRO polypeptides and nucleic acids encoding the polypeptides, in gene therapy, chromosome identification, tissue typing, or as hybridization probes in chromosome and gene mapping.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel human secreted and transmembrane protein PRO337 cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 125; 315pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADC49074 standard; cDNA; 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-2001; 2001MO-US017800.
29-JUN-2001; 2001MO-US021066.
09-APR-2002; 2002US-00119480.
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Grimaldi JC, Gurney AL,
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P-PSDB; ADC49075.
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ADC49074

ID ADC49074

XX ADC4

XX ADC4

XX ADC4

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The invention describes an isolated PRO (secreted and transmembrane)

CC polypeptide (1). PRO982, PRO1160, PRO1187 or PRO132 polypeptide are
useful for stimulating the proliferation of or gene expression in

CC for stimulating the proliferation of differentiation of chondrocyce

calls. PRO321, PRO725, PRO125, PRO1155, PRO1195 polypeptide are useful

CC calls. PRO31, PRO357, PRO125, PRO1195, PRO1199 polypeptide

calls. PRO131, PRO357, PRO1155, PRO1155, PRO1199, PRO1199, PRO1199

CC are useful for stimulating the release of tumour nerrosis factor (TMF)-

alpha from human bhood. PRO9182, PRO315, PRO1191, PRO1191, PRO1190,

CC PRO1286, PRO1319, PRO1156, PRO1195, PRO1194, PRO1191, PRO1191,

CC PRO1286, PRO1319, PRO1165, PRO1195, PRO1179, PRO1191, PRO1191,

CC PRO1181, PRO1186, PRO1186, PRO1195, PRO1174, PRO1191, PRO1191,

CC PRO1887, PRO1187, PRO1196, PRO1197, PRO1197, PRO1191, PRO1191,

CC PRO1887, PRO5182, PRO1184, PRO1191, PRO1191, PRO1191, PRO1191,

CC PRO1887, PRO5182, PRO1184, PRO1196, PRO1191, PRO1191, PRO1191,

CC PRO1887, PRO5182, PRO1184, PRO1196, PRO1191, PRO1191, PRO1191,

CC PRO1887, PRO5182, PRO1184, PRO1194, PRO1191, PRO1191, PRO1191,

CC PRO1881, PRO5182, PRO1184, PRO1194, PRO1191, PRO1191, PRO1194, PRO1194,

CC PRO1881, PRO5182, PRO1184, PRO1194, PRO1194, PRO1194, PRO1194,

CC PRO5189, PRO5182, PRO1184, Or PRO11095, PRO1194, PRO5193, PRO4183,

CC PRO5189, PRO5182, PRO1184, Or PRO1196, PRO1194, PRO5178, PRO4183,

CC Inhibiting the proliferation of normal human dermal fibroblast cells. PRO

CC Inhibiting the proliferation of normal human dermal fibroblast cells. PRO

CC Inhibiting the proliferation of normal human dermal fibroblast cells.

CC Arre useful for decenting the presence of tumour in a mammal mine

CC Inver tumour. (I) is useful as molecular weight markers, for tissue

CC tumour, colon tumour, breast tumour, present tumour, recenting agents. A polymoredicate tumour; rectal tumour.

CC Typing, or as therspeutic agentes. PRO51272, PRO4405 polypeptide

CC CA PRO5189 PRO5189 PRO5187, PRO51872, P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 AATCTATCAGGAAAGAAAGAAAAAAAACGAACCTGACAAAAAAGAAAAAGAAGAAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 AAGAAAAAAAACATCAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 CTTCACGGGGCTGCTCTCTTTCTTTCCAAGGAGTGCCCGTGCGCAGGAGATGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 100.
Matches 1679; Conservative
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Oy 1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGC Db 1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGC	Qy 1621 GTAGACTGTGCCACGGCGTGTGTTGTGAAA 	RESULT 43 ADC49591 LD ADC49591 standard; cDNA; 1679 BP.	AA ADC49591; XX DT 18-DEC-2003 (first entry)	DE Novel human secreted and transmembrane proxXX XX human; secreted and transmembrane protein	KW VULNERARY; ANCIRCIATION; DESTROYE CELL DI KW Pericyte cell differentiation; chondrocytic KW (TNF)-alpha release; dermal fibroblast cel VW Acrms I fibroblast cell differentiation;	KW colon tumour; breast tumour; prostate tumo KW liver tumour; tissue typing; chromosome m KW gene therapy.	OS Homo sapiens. XX PN US2003088071-A1.	XX PD 08-MAY-2003. XX PF 29-AUG-2002; 2002US-00232231.	XX	AA (GETH) GENENTECH INC. XX PI Baker KP, Desnoyers L, Gerritsen ME, G	GILMAIGI OC, GUINEY AL, SMICH V, S WPI; 2003-801156/75. P-PSDB; ADC49592.	A. New PRO polypeptides and nucleic acids en PT in gene therapy, chromosome identification PT hybridization probes in chromosome and geven	PS Claim 2; SEQ ID NO 125; 315pp; English. XX CC The invention describes an isolated PRO (CC polypeptide (1) FROSE, FROILEO, FROILEO CC USEful for stimulating the proliferation CC pericyte cells. PROSE7, PRO29, PRO1272 o CC for stimulating the proliferation or diff	CC Cells. PRO231, PRO351, PRO155, FRO155, CC are useful for stimulating the release of CC alpha from human blood. PRO982, PRO357, PCC PRO347, PRO337, PRO525, PRO545, PRO5451, PRO545, PRO545, PRO5451, PRO545, PRO545, PRO5451, PRO545, PRO5451, PRO545, PRO5451, PRO545, PRO5451, PRO545, PRO5451, PRO5451	CC FRO1345, FRO1347, FRO2357, FRO2357, FRO2057,	CC PROSSEN, PROSSEN FRANCE, FRANCE CC PROSSEN, PROSENCE CC Stimulating the proliferation of normal h CC PROSE, PRO
481 GGTGCAGACAACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 540	CAAAATTGTAGAGATTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC	601 CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 660 601 CTGCATAGCAACTGGTAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 660	661 GGTHGGCTHTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 720	721 AGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA 780 	781 GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 840	841 ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 900 	901 CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGAAAACAGACCTTT 960 			1081 CAGGAGGTGAGGAACGGACGACGAGGGGGGGGGCTGCTGGCTG	1141 GGTCTTGCACCTGCTTCTCAAATTTTGATGTGCCACCTACTTCCCCACCCGGGAAAGGCT 1200	1201 GCCGCCACCACCACCACCACCAACAGCAACACCAACGCAACCAACCAACCAATCAGATA 1260 	1261 TATACAAATGAAATTAGAAGAAACACAGCCTCATGGGACAGAAATTTGAGGGAGG	1321 AAAGAATACTTTGGGGGAAAAGAGTTTTAAAAAGAAATTGAAAATTGCCTTGCAGATA 1380 	1381 TTTAGGTACAATGGAGTTTTTTCCCAAAGGGAAGAACACAGGACACCGGCTTGGA 1440 	1441 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCGGGAAGGGCTCAGCCTC 1500 	1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560
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RO (secreted and transmembrane)
1187 or PRO1329 polypeptide are
1100 of or gene expression in
72 or PRO4405 polypeptide are useful
differentiation of chondrocyte
5. PRO1306 or PRO1419 polypeptide
6. of tumour necrosis factor (TNR)7. PRO725, PRO1306, PRO1419, PRO140,
7. PRO125, PRO1304, PRO1411, PRO1909,
RO1192, PRO1244, PRO1411, PRO1309,
RO1192, PRO1279, PRO13740, PRO1338,
RRO1474, PRO1917, PRO1376, PRO1338,
RRO1474, PRO1917, PRO1976, PRO1326,
1 polypeptide are useful for
12.72, PRO1488, PRO4302, PRO4408, GGCCCAAGCGTGCGCGCGCACTTTG 1620 AACGTGAAATAAAAAGAGCAAAAAAAA 1679 |||||||||||||||||||| AACGTGAAATAAAAAGAGCAAAAAAAA 1679 I proliferation;
oxyte cell proliferation;
ur necrosis factor alpha release;
cell proliferation;
linhibitor; tumour;
lumour; rectal tumour;
e mapping; gene mapping; nncoding the polypeptides, useful ion, tissue typing, or as gene mapping. Goddard A, Godowski PJ; han JF, Watanabe CK, Wood WI; n; PRO; gene; ss; cytostatic; rotein PRO337 cDNA.

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inhibiting the proliferation of normal human dermal fibroblast cells. PRO polypeptides such as PRO6004, PRO491, PRO1174, PRO5778, PRO4332, etc., are useful for detecting the presence of tumour in a mammal which involves comparing the level of expression of the above PRO polypeptides in a test sample of cells taken from the mammal, and a control sample of normal cells of the same cell type, where a higher level of expression of the PRO polypeptides in the test sample as compared to the control sample is indicative of the presence of tumour in the mammal. The tumour is lung tumour, bareat tumour, profette tumour, rectal tumour or liver tumour. (I) is useful as molecular weight markers, for tissue typing, or as therapeutic agents. A polymoclectide (II) encoding (I) is useful for Anomosome and gene mapping or gene therapy. (II) is useful for Anomosome and gene mapping or gene therapy. (II) is useful correcting useful reagents. PRO357, PRO229, PRO1272 or PRO4405 polypeptide secenting useful reagents. PRO357, PRO229, PRO1272 or PRO4405 polypeptide sport injuries). This sequence encodes a human secreted and transmembrane processed and transmembrane.
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498 A; 432 C; 419 G; 330 T; 0 U; 0 Other

	Gaps 0;	CAACAC 60	AACAC 60	AGAAG 120	AGAAG 120	GCAAT 180	GCAAT 180	GATGC 240	GATGC 240	CTCAG 300	CTCAG 300	CTCTA 360	CTCTA 360	CAAAC 420	CAAAC 420	TGCTC 480	rdcrc 480	TCTCC 540	TCTCC 540	CTCAC 600	CTCAC 600	PAAGC 660	AAAGC 660	CAGTC 720	CAGIC 720	
, 0 Other;	Length 1679; Indels 0;	ACAAGCTTGAGAGC	GTTGTGTCCTTCAGCAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC	AATCTATCAGGAAAGAAAGAAAAAAAACGGAACCTGACAAAAAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAG	AATCTATCAGGAAAGAAAGAAAGAAAAAAACCGAACCTGACAAAAAAAGAAAAAAAA	AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAAATTCTATCTTTGGGCAAT	AAGAAAAAATCATGAAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT	CTICACGGGGCTGGCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCAGAAGTGC	cccarcccaccac	CACCTTCCCCAAAGCTATGGACAACGTGACGGCGCGCAGGGGGAGAGCGCCCCCTCAG	CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCTCAG	GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA	GIGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCTTA	TGCTGGGAATGACAAGTGGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC	CTTCTGAGCAACACC	GCAGTACAGCATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC	GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC	GGTGCAGACAGCACCCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC	GGTGCAGACAGACAACCAACGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC	CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC	CAAAATTGTTGTTTTTTTTTTTTTTTTTTTTTTTTTTTT	CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCCCCAAAGC	CIGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCCAAAGC	GGTTGGCTTTGTGAGAGGAGGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGCAGC	GGTTGGCTTTGTGAGGAGACGAATACTTGGAAATTCAGGGCATCACCGGGAGCAGTC	
G; 330 T; 0 U	Score 1679; DB 1; Pred. No. 6.7e-05; Mismatches 0;	rccitcagcaaaacagtgaatttaaatctccttgcacaagcttgaag	rrradarcrecried	AAAACCGAACCTGAC	AAAACCGAACCTGAC	AGCCAAAAATGCACA	AGCCAAAAATGCACA	TCTTCCAAGGAGTGC	TCTTCCAAGGAGTGC	TGACGGTCCGGCAGC	TGACGGTCCGGCAGG	GGGTGGCCTGGCTA	GGGTGGCCTGGCTA	ATCCTCGCGTGGTC	ATCCTCGCGTGGTC	TGGATGTGTATGAC	TGGATGTGTATGACC	CCTCTAGGGTCCAC	CCTCTAGGGTCCAC	TCTCCATTAATGAAC	TCTCCATTAATGAA	CTACGGTTACTTGG	CTACGGTTACTTGG	ACTTGGAAATTCAG	ACTIGGAAATICAG	
A; 432 C; 419	0%; 0%; 0;	AGCAAAACAGTGGA:	AGCAAAACAGTGGA	AGGAAGGAAGAAA	agaaagaaagaaa	CATGAAACCATCC	DATGAAAACCATCC	SECTECTCTGTGTC	geriecicherer.	AGCTATGGACAACG	AGCTATGGACAACG	CAACCGGGTCACCC	CAACCGGGTCACCC	CAAGTGGTGCCTGG	CAAGTGGTGCCTGG	CGAGATCCAGAACG	CGAGATCCAGAACG	CAACCACCCAAAGA	CARCCACCCAAAGA	BATTTCTTCAGATA	ATTTCTTCAGATA	rggtagaccagago	rggtagaccagago	BAGTGAAGACGAAT.	SAGTGAAGACGAAT	
1679 BP; 498	Query Match Best Local Similarity 100 Matches 1679; Conservative	GTTGTGTCCTTCZ	driererctro	AATCTATCAGGAZ	AATCTATCAGGA/	AAGAAAAAATC	AAGAAAAAAATC	CTTCACGGGGCTC	CTTCACGGGGCTC	CACCTTCCCCAA	CACCTTCCCCAA	GTGCACTATTGAC	GTGCACTATTGAC	TGCTGGGAATGA	TGCTGGGAATGA	GCAGTACAGCAT	GCAGTACAGCAT	GGTGCAGACAGA	GGTGCAGACAGA	CAAAATTGTAGAC	CAAAATTGTAGA	CTGCATAGCAAC	CTGCATAGCAACT	GGTTGGCTTTGT	GGTTGGCTTTGT	
Sequence	ery Match sst Local S itches 1679	ਜ	ਜ	61	61	121	121	181	181	241	241	301	301	361	361	421	421	481	481	541	.541	601	601	661	199	
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Human; secreted and transmembrane protein; PRO; gene; ss; cytostatic; vulnerary; antiarthritic; pericyte cell proliferation; pericyte cell differentiation; chondrocyte cell differentiation; tumour necrosis factor alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell proliferation; colon tumour; lung tumour; locato tumour; breast tumour; prostate tumour; rectal tissue typing; chromosome mapping; gene mapping;
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Homo sapiens.

US2003088072-A1.

08-MAY-2003.

29-AUG-2002; 2002US-00232233.

25-JUL-2000; 2000US-0220605P. 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480.

(GETH) GENENTECH INC.

Baker KP, Desnoyers L, Gerritsen ME, Goddard A, Godowski PJ; Grimaldi JC, Gurney AL, Smith V, Stephan JF, Watanabe CK, Wood WI;

WPI; 2003-801157/75. P-PSDB; ADC47453. New PRO polypeptide for use as molecular weight markers for protein electrophoresis purposes and for detecting the presence of tumor in a mammal.

Claim 2; Fig 125; 314pp; English.

The invention describes an isolated PRO (secreted and transmembrane)

polypeptide (I). PRO982, PRO1160, PRO187 or PRO1329 polypeptide are

completed to stimulating the proliferation of or gene expression in

periotyce cells. PRO377, PRO222, PRO1272 or PRO4165 polypeptide are useful

cor stimulating the proliferation of differentiation of chondrocyte

cells. PRO337, PRO525, PRO1155, PRO1156, PRO149 polypeptide

are useful for stimulating the release of tumour necrosis factor (TNF)
alpha from human blood. PRO982, PRO3157, PRO125, PRO1196, PRO149, PRO214,

PRO127, PRO137, PRO526, PRO3157, PRO125, PRO1196, PRO149, PRO1419,

PRO127, PRO1337, PRO526, PRO316, PRO8197, PRO1197, PRO1419, PRO1316,

PRO125, PRO1181, PRO1186, PRO1186, PRO1197, PRO1197, PRO1181, PRO1326,

PRO125, PRO1330, PRO9183, PRO1186, PRO1187, PRO1197, PRO1404, PRO1326,

PRO125, PRO1328, PRO4341, PRO1186, PRO1197, PRO1197, PRO1416, PRO1326,

PRO1989, PRO5938, PRO9186 or PRO1069 polypeptide are useful for

trimulating the proliferation of normal human dermal fibroblasts cells.

PRO5934, PRO525, PRO7184, or PRO1196, PRO1433, PRO432, PRO4326,

PRO181, PRO525, PRO7184, or PRO1197, PRO1486, PRO4322,

CC PRO181, PRO525, PRO7184, or PRO1194, PRO1174, PRO5778, PRO4322,

PRO5934, PRO5938, PRO5184, or PRO1194, PRO1174, PRO5778, PRO4322, etc.,

PRO5934, PRO5938, PRO5184, or PRO1194, PRO1714, PRO5778, PRO4322, etc.,

PRO5934, PRO5938, PRO5184, PRO1194, PRO1714, PRO5778, PRO4322, etc.,

PRO5934, PRO5938, PRO5184, PRO1194, PRO5778, PRO5938, PRO5778, PRO5938, etc.,

CA inhibiting the proliferation of normal human dermal fibrobast cells.

CC inhibiting the proliferation of formal human dermal fibrobast cells.

CC inhibiting the proliferation of formal human dermal fibrobast cells.

CC Involves comparing the level of expression of the above PRO polypeptides

CC Involves comparing the presence of tumour in a mammal which

CC Involves oppragned as malecally Profession of the propertion tumour, breast tumour, in the mammal. The tumour is luminated as the presence of tum

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14-SEP-1998; 98W0-US018884, 14-SEP-1998; 98W0-US01903; 14-SEP-1998; 98W0-US01903; 14-SEP-1998; 98W0-US01903; 14-SEP-1998; 98W0-US01903; 14-SEP-1998; 98W0-US01903; 14-SEP-1998; 98W0-US01903; 17-SEP-1998; 98W0-US01903; 17-SEP-1998; 98W0-US01903; 17-SEP-1998; 98W0-US01903; 17-SEP-1998; 98W0-US01903; 17-SEP-1998; 98W0-US01903; 17-SEP-1998; 98W0-US01903; 17-SEP-1999; 98W0-US01903; 17-SEP-1999; 98W0-US01903; 17-SEP-1999; 98W0-US01903; 17-SEP-1999; 98W0-US01903; 17-SEP-1999; 98W0-US01903; 18-SEP-1999; 99W0-US01900; 18-SEP-1999; 99W0-US01903; 19-MAX-1999; 99W0-US01903; 99W0-US0
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                                                                                                                                                                                                                                                                                                                                                                             CAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGTCTGGCTTGCTGCTGCCTCTTCT
                                                                                                                  CAGCGAGGTGAGCCACGTCGAGGAGGGCAGGCTGCGTCTGGCTGCTGCTTCTTCT
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98WO-US012456.
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12-JUN-1998;
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61 AATCTATCAGGAAAGAAAGAAAGAAAAAAACCGAACCTGACAAAAAAAGAAGAAAAAAGAAG 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention relates to novel nucleic acids encoding human PRO secreted
and transmembrane proteins. Extracellular proteins play important roles
to the formation, differentiation and maintenance of multicillular
corganisms. The fate of many individual cells (for example proliferation,
corganisms. The fate of many individual cells (for example proliferation,
migration or differentiation) is typically governed by information
corporated from orber cells and the immediate environment. The information
cis often transmitted by secreted polypeptides (for example mitogenic
factors, survival factors cytotoxic factors, differentiation factors,
neuropeptides and hormones) which are received and interpreted by diverse
cell receptors and membrane bound proteins. These membrane bound proteins
and receptors may be of use as pharmaceutical and diagnostic agents, such
and receptors may be of use as pharmaceutical and diagnostic agents, such
corporates the amino acid sequences of novel human membrane bound receptors
and proteins, along with the CDNA sequences encoding them. The novel
corporation of chondrocytes. The nucleic activities through the
constitution of chondrocytes. The nucleic activities through the
constitution of chondrocytes. The nucleic acids of the invention may be
constituted for the manufacture of a medicament for diagnosing or treating a
cumour in a mammal. In addition, they may be useful for measuring or
detecting the expression of a tumour associated gene. The present
constitution of the manufacture of a tumour associated gene. The present
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A, Godwoski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nucleic acid, useful for manufacturing a medicament
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; SEQ ID NO 375; 637pp; English.
                                                                                                                     01-JUN-2001; 2001W2-00872035.
01-JUN-2001; 2001W2-00874503.
05-JUN-2001; 2001W2-00884536.
19-JUN-2001; 2001W2-00886342.
20-JUN-2001; 2001W2-00886342.
21-JUN-2001; 2001W2-00887879.
22-JUN-2001; 2001W2-00807879.
22-JUN-2001; 2001W2-00807879.
                                      10-MAY-2001; 2001US-00854208.

10-MAY-2001; 2001US-0086218.

18-MAY-2001; 2001US-00860216.

25-MAY-2001; 2001US-00866034.

25-MAY-2001; 2001US-00866034.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diagnosing or treating tumor.
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09-AUG-2001; 2001US-0092796.
16-AUG-2001; 2001US-00931836.
19-DEC-2001; 2001US-00028072.
                                                                                                                                                                                                                                                 09-JUL-2001; 2001WO-US021735.
18-JUL-2001; 2001US-00908827.
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Gerritsen ME, Goddard
Smith V, Stewart TA,
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P-PSDB; ADC52950.
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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Gerritsen ME, Goddard
Smith V, Stewart TA,
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P-PSDB; ADC57304.
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This invention relates to novel nucleic acids encoding human PRO secreted and transmembrane proteins. Extracellular proteins play important roles in the formation, differentiation and maintenance of multicallular organisms. The fate of many individual cells (for example proliferation, capanisms. The fate of many individual cells (for example proliferation, migration or differentiation) is typically governed by information considered from orber cells and the immediate environment. The information is often transmitted by secreted polypeptides (for example mitogenic factors, survival factors, cytotoxic factors, differentiation factors, call receptors and hormones) which are received and interpreted by diverse call receptors may be of use as pharmacentical and diagnostic agents such as in the blocking of receptor-ligand interactions. The current invention provides the amino acid sequences of novel human membrane bound receptors and proteins, along with the cDNA sequences encoding them. The novel proteins of the invention may have cytostatic activities through the stimulation of chondrocytes. The nucleic acids of the invention may be tumbur in a mammal. In addition, they may be useful for measuring or detecting the expression of a tumour associated gene. The present consideration of the present consideration of the mannial at the expression of a tumour associated gene. The present consideration of the mannial consideration of the mannial consideration of the measuring or detecting the expression of a tumour associated gene. The present consideration of the mannial consideration of the measuring or expense the mannial consideration of a tumour associated gene. The present consideration of the mannial consideration of a tumour associated gene. The present consideration of the mannial consideration of the mannial consideration of the consideration of the consideration of the consideration of the consideration of a tumour associated gene of the present consideration of the consideration of the consideration of the consi
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100.0%; Score 1679; DB 1;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0;
Claim 2; SEQ ID NO 375; 637pp; English.
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ADC60494 standard; cDNA; 1679 BP.
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Human; secreted and transmembrane protein; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; nebnondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose uptake modulator; FFA uptake modulator; cell proliferation; cell differentiation; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; rheumatoid arthritis; maemoglobin-associated disorder; thalassaemia; immune system cell·infiltration; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker; gene; ss.
                                    Novel human secreted and transmembrane protein PRO337 cDNA
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98WO-US02485.
99WO-US000106.
99WO-US0005028.
99WO-US0005190.
200WO-US006119.
99WO-US006115.
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99WO-US0218147
99WO-US028313
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99WO-US031243.
99WO-US031274.
2000WO-US00219.
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98WO-US022991.
98WO-US022992.
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(first entry)
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14-MAY-1999;
01-SEP-1999;
08-SEP-1999;
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07-OCT-1998;
29-OCT-1998;
20-OCT-1998;
20-NOV-1998;
01-DEC-1998;
05-JAN-1999;
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30-NOV-1999;
30-NOV-1999;
01-DEC-1999;
18-DEC-2003
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2001US-00808689.
2001US-00816744.
2001US-00828366.
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2001US-00854280
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20-JUN-2001;
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Deforge L, Desnoyers L, Filvaroff E, Gao A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Baker KP, Beresini M, De Gerritsen ME, Goddard A, Smith V, Stewart TA, Tum

WPI; 2003-801152/75. P-PSDB; ADC60495 PRO nucleic acid, useful for preparing a recombinant PRO polypeptide for manufacturing a medicament for diagnosing or treating tumor. New and

Claim 2; Fig 375; 638pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The

invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpa (TNF-alpa) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for cond. Dreas, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating a attisense RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful useful in the development and screening of therapeutically useful regents. The RNO polypeptides or antibodies are used in preparing of medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of thuman microvascular endothelial cells, for modulating the uptake of glucose or FRA (free fatty acid) by skeltal musche cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, or Tlymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of prochems, articular cartilage are also useful for treating various conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polypucle of the infiltration. Note: The sequence expression of problems, articular cartilage defects, osteoather is also available in clientering tormat from USPTO at seqdat 120 180 180 240 240 300 300 360 360 420 480 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 480 540 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC 420 GGTGCAGACAGACAACCACCCAAAGACTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 540 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAAATCTCCCTTGCACAAGCTTGAGAGCAACACA 60 GITGIGICCITCAGCAAACAGIGGAITITAAAICICCITGCACAAGCITGAGAGCAACAC 60 121 AAGAAAAAAAACATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCCTCAG CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGGCGCCACCCTCAG 301 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAAC AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT CTTCACGGGGCTGGCTGTCTGTGTTCTTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC CTTCACGGGGGCTGGCTGTTCTTTCCAAGGAGTGCCCGTGCGCAGCGAAAGAAGC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA GGTGCAGACAGACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 0; Gaps Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; 241 121 181 181 241 301 361 361 421 421 481 481 \$ d ò 셤 원 ò 임 원 ò g à g ઠે ઠે ò g à

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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypuclectides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrena), lung, colon, breast, prostence of a tumour in a mammal (e.g. adrena), lung, colon, breast, prostence, rectal, kidney, cervical and liver tumours). The polymuclectides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating in the meast of the polymuclectides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 2; Fig 375; 637pp; English.
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P-PSDB; ADC50970.
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PRO nucleic acid, useful for preparing a recombinant PRO polypeptide for manufacturing a medicament for diagnosing or treating tumor.

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1621 GTAGACTGTGCCACCACCACCACTGTGTAAAACGTGAAATAAAAAAGAGCAAAAAAA 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; secreted and transmembrane protein; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte; tumour; adreal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose uptake modulator; FFA uptake modulator; cell proliferation; beell differentiation; Refered muscle cell; adhocyte cell; endocyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia; immune system cell infiltration; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker; gene; ss.
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Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood MI, Zhang Z;
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01-SEP-1999; 99WO-US020111.
18-C77-1999; 99US-00403297.
18-FEB-2000; 2000WO-US002432.
01-DEC-2000; 2000WO-US032678.
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GGTCACCGTGAACTATCCACATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCCGTGGG

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Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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GGTTGGCTTTGTGAAGAGGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC CTGCATAGCAACTGGTAGACCCAGAGCCTACGGTTACTTGGAGACACACATCTCTCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGCATCACCCGGGAGCAGC 601 601 199 561

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> AC ADC65496;
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> IR-DEC-200
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> DT 18-DEC-200
> XX
> DE Human PRO

18-DEC-2003 (first entry)

720 780

Human PRO polynucleotide #188

Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tummour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FRA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.

Homo sapiens.

US2003087362-A1.

08-MAY-2003

22-APR-2002; 2002US-00127844.

05-JUN-2000; 2000US-0209832P. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Gao W; Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G: Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-801147/75. P-PSDB; ADC65497 New PRO nucleic acid, useful for manufacturing a medicament for diagnosing or treating tumor.

Claim 2; Fig 375; 637pp; English.

Transmembrane polypeptides on antibody which specifically binds to a PRO invention also relates to a natibody which specifically binds to a PRO polypeptides are transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour in an amamal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The proliferation or differentiation of chondrocyte cells and amethod for colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as this enset in preparing PRO polypeptides by recombinant techniques and in actionate the proparing propagation of preparing PRO polypeptides by recombinant techniques and in section propagation of companies. The PRO polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of orgene expression in periovy ecells, for stimulating differentiation of adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating the upcake of glucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating che proliferation of orgene expression in periovyte cells, for stimulating che proliferation of orgene expression in periovyte cells, for stimulating che proliferation of subspecies such as sports injuries and arthritis. FRO polypeptides such as such as sports injuries and arthritis and conditions which arthritis and conditions which man associated disorders such as various thalassamias and conditions which man esquence represents a human PRO polyment is also available in electronic format form forward and provide and also available in electronic format form the proliferation of organications are also useful for trat invention relates to isolated human PRO polypeptides (secreted and from USPTO at segdata.uspto.gov/sequence.html.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

Query N Best Lo Matches	Match 100.0%; Score 1679; DB 1; Length 1679; Local Similarity 100.0%; Pred. No. 6.7e-05; es 1679; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
ò	1 GTIGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAACAC 60
Dp	GICCTTCAGCAAAACAGGATTTAAATCTCCTTGCACAAGCTTGAGCAACAACA
ò	61 AATCTATCAGGAAAGAAAGAAAAAAAACGAACCTGACAAAAAAGAAAAAAAA
8 8	1 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 18
셤	ATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 18
ò	81 CTTCACGGGGCTGCTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGGAGTGC 24
OB	CACGGGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGGAGATGC 24
ò a	241 CACCTTCCCCAAAGCTATGGACACAGGGGCGCCAGGGGGGGG
ò	ACTATTGACAACGGGGTCACCGGGGTGGCCTGGCTAAACGGCAGCACCTCCT
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ò	1 GGTGCAGACAGACAACCACCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 54
qq	radacadacadecececadadecetetadegetecaceteatigecadetatetee 54
λŏ	CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 60
d d	cticagatatetecattaatgaagggaacaatattageetea
ò	01 CTGCATAGCAACTGGTAGACCAGAGCCTACGGGTTACTTGGAGACACATCTCTCCCAAAGC 66
අු	9 U
λõ	61 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 72:
셤	72
ò	21 AGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCCGTGGTACGGAGAGTAAA 78
qq	:GAGTGCCAGTGCCTCCAATGACGTGGCCGCCCCTGGTACGGAGAGTAAA 78
Š	CCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 84
ą a	zaccercaacratecaccaracarreagaaccaagggracaggrecec
ò	CAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 90
q	CAGCAGTCCCCTCAGCAGAATTCCAGTGGT
ò	9
음	3GATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAAGTGGAAAACAGACCTTT 960
ò	61 CCTCTCAAAACTCATCTTCTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT 102
qq	<u>CTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTG</u>

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GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGGCGCGT
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01-SEP-1999; 99WS-005020111.
18-OCT-1999; 90WS-00403297.
18-FEB-2000; 2000WO-US004342.
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in the formation, differentiation and maintenance of multicallular roles in the formation, differentiation and maintenance of multicallular corganisms. The face of many individual cells (creatable proliferation, migration or differentiation) is typically governed by information is received from other cells and the immediate environment. The information is often transmitted by secreted polypeptides (for example mitogenic factors, survival factors, cytotoxic factors, differentiation factors, neuropeptides and hormones) which are received and interpreted by diverse cell receptors or membrane bound proteins. These membrane bound proteins and receptors or membrane bound proteins. These membrane bound proteins and receptors or membrane bound interpreted by diverse cell receptors may be of use as pharmaceutical and diagnostic agents, such as in the blocking of receptor-ligand interactions. The current invention provides the amino acid sequences of novel human membrane bound receptors and proteins of the invention may have cytostatic activities through the stimulation of chondrocytes. The nucleic acids of the invention may be useful for the manufacture of a medicament for diagnosing or treating or temporation in a mammal. In addition, they may be useful for measuring or detecting the expression of a tumour associated gene. The present
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                                                                                                                                                                                                                                                                                                                                          This invention relates to novel nucleic acids encoding human PRO secreted
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                                                                                                                                                                                                                                     PRO nucleic acid, useful for preparing a recombinant PRO polypeptide for manufacturing a medicament for diagnosing or treating tumor.
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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100.0%; Score 1679; DB 1;
Best Local Similarity 100.0%; Pred, No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                             Claim 2; SEQ ID NO 375; 637pp; English.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
                                                                                              , Beresini M,
n ME, Goddard /
Stewart TA,
                                                         (GETH ) GENENTECH INC
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Smith V,
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(GETH ) GENENTECH INC.
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TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human, PRO, membrane bound protein, membrane bound receptor; cell proliferation; cell migration; cell differentiation, mitogenic factor; survival factor; yotocxic factor; defiferentiation factor; neuropeptide; hormone; cell receptor; receptor-ligand interaction; cytostatic; chondrocyte; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel human secreted and transmembrane protein cDNA Seg ID375.
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01-DEC-1999; 99WO-US028634.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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expression of a tumour associated gene. The present cDNA sequence which encodes a human PRO protein of
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                                                  Length 1679;
                                 Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
                                                                  Indels
                                                 Query Match 100.0%; Score 1679; DB 1; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0;
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WPI; 2003-801144/75.
P-PSDB; ADC59079.
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
17-SEP-1998; 98US-0100710P.
01-SEP-1999; 99WG-US020111.
18-OCT-1999; 99US-00403297.
30-NOV-1999; 99WG-US032878.
19-DEC-2001; 2001US-00028072.
                                                                                                                                                                                                               Baker KP, Beresini M,
Gerritsen ME, Goddard
Smith V, Stewart TA,
                                                                                                                                                                    (GETH ) GENENTECH INC
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useful for preparing a recombinant PRO polypeptide a medicament for diagnosing or treating tumor. New PRO nucleic acid, and for manufacturing

Claim 2; SEQ ID NO 375; 637pp; English

This invention relates to novel nucleic acids encoding human PRO secreted and transmembrane proceins. Extracellular proteins play important roles in the formation, differentiation and maintenance of multicallular organisms. The face of many individual cells (for example proliferation, migration or differentiation) is typically governed by information received from other cells and the immediate environment. The information is often transmitted by secreted polypeptides (for example mitogranic factors, survival factors, cytotoxic factors, differentiation factors, neuropeptides and hormones) which are received and interpreted by diverse cell receptors or membrane bound proteins. These membrane bound proteins and receptors may be of use as pharmaceutical and diagnostic agents, such as in the blocking of receptor-ligand interactions. The current invention provides the amino acid sequences of novel human membrane bound receptors and proteins of the invention may have cytostatic activities through the crimulation of chondrocytes. The nucleic acids of the invention may be useful for the manufacture of a medicament for diagnosing or treating a temmoral in addition, they may be useful for measuring or detecting the expression of a tumour associated gene. The present invention

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

CTTCACGGGCTGGCTGCTCTTGTTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC 240 AATCTATCAGGAAAGAAAGAAAAAAAAAAACCGAACCTGACAAAAAAGAAGAAAAAGAAG 120 61 AATCTATCAGGAAAGAAAGAAAAAAAAAACCGAACCTGACAAAAAAAGAAGAAAAGAAGAAG 120 AAGAAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 180 121 PAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 180 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGAGCGCCACCCTCAG 300 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 360 GTGCACTATTGACAACCGGGTCACCCGGGTGGCTAAACCGCAGCACCATCCTCTA 360 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCTCAG 300 9 Gridificaticaticade Analacada de Cartina Antonica de Cartina de Ca GITGTGTCCTTCAGCAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC Gaps ö Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0; Н 61 121 181 241 181 241 301 301 ઠ 셤 ઠે qq Š g ઠે g ò g ö

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٥٧	421	3CTC 48
QQ	421	CAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 48
æ		GGTGCAGACAACAACACCCAAAGACCTCTAGGGTCCACTCATTGTGCAAGTATCTCC 540
qq	481	zagacagacaaccaccaaagaccrctagggrccacctcattgrgcaagtatctcc 54
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ζō	781	CACCGIGAACTAICCACCAIACAITICAGAAGCCAAGGGIACAGGIGICCCCGIGGG 84
qq	781	ICACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 84
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ò	961	TCAAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTGCGT 102
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ò	1021	TICCAACAAGCTGGGCCACACACAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT 1
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                                                                                                                                                                                                                                                                                                                                                                                                                         human, PRO; membrane bound protein; membrane bound receptor; cell proliferation; cell migration, cell differentiation, mitogenic factor; survival factor; cytotoxic factor; differentiation factor; neuropeptide; hormone; cell receptor; receptor-ligand interaction; cytostatic; chondrocyte; tumour;
                                                                                                                                                                                                                                                                                                                                                                                              Novel human secreted and transmembrane protein cDNA Seq ID375.
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01-SEP-1999, 99WG-010020111.
18-OCT-1999, 99US-00403297.
18-FEB-2000, 2000WG-US015264.
23-AUG-2000, 2000WG-US035522.
01-DEC-2000; 2000WG-US035678.
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            and receptors may be of use as pharmaceutical and diagnostic agents, such as in the blocking of receptor-ligand interactions. The current invention provides the amino acid sequences of novel human membrane bound receptors and proteins, along with the CDNA sequences encoding them. The novel proteins of the invention may have cytostatic activities through the stimulation of chondrocytes. The mucleic acids of the invention may be useful for the manufacture of a medicament for diagnosing or treating at detecting the expression of a tumour associated gene. The present sequence is a CDNA sequence which encodes a human FRO protein of the
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cell receptors or membrane bound proteins.
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                                      CCTCTCAAAACTCATCTTCTAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT
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ADC58526
ID ADC58526 standard; CDNA; 1679
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XX I8-DEC-2003 (first entry)
XX Numan, PRO; membrane bound pro
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ADC58526; 18-DEC-2003 (first entry) Novel human secreted and transmembrane protein cDNA Seg ID375.

В В human; PRO; membrane bound protein; membrane bound receptor; cell proliferation; cell migration; cell differentiation; mitogenic factor; survival factor; cytotoxic factor; differentiation factor; neuropeptide; hormone; cell receptor;

CTICACGGGGCTGCTCTGTGTCTCTTCCAAGAGTGCCCGTGCGCAGCGGAGATGC 240

181

8 8

CTTCACGGGGTTGCTTCTTGTGTTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC

This invention relates to novel nucleic acids encoding human PRO secreted and transmembrane proteins. Extracellular proteins play important roles in the formation, differentiation and maintenance of multicellular corganisms. The fate of many individual cells (for example proliferation, organisms. The fate of many individual cells (for example proliferation, migration or differentiation) is typically governed by information.

Corganisms. The fate of process of the individual cells (for example proliferation, received from other cells and the immediate environment. The information is often transmitted by secreted bolypeptides (for example mitogenic factors, survival factors, cytotoxic factors, differentiation factors, concrepetides and hormones) which are received and interpreted by diverse cell receptors or membrane bound proteins. These membrane bound proteins and receptors may be of use as pharmaceutical and diagnostic agents, such as in the blocking of receptor-ligand interactions. The current invention provides the amino acid sequences of novel human membrane bound receptors and proteins of the invention may have cytostatic activities through the stimulation of chondrocytes. The nucleic acids of the invention may be useful for the manufacture of a medicament for diagnosing or treating a tumning the expression of a tumnor associated gene. The present considerating the expression of a tumnor associated gene. The present considerating the expression of a tumnor associated gene. The present consideration of the condition of a tumnor associated gene. The present consideration of the considerating and the condition of a tumnor associated gene. The present considerating the expression of a tumnor associated gene. The present consideration of the condition of a tumnor associated gene. The present considerating the result of the condition of the condition of a tumnor and a tum 120 120 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAATGCACAATTCTATCTTGGGGAAT 180 9 09 3 receptor-ligand interaction; cytostatic; chondrocyte; tumour; ss; gene 1 GITGIGICCTICAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 1 GITGIGTCCTTCAGCAAAACAGIGGATTTAAATCTCCCTTGCACAAGCTTGAGAGCAACAC Gao Isolated nucleic acid for use in industrial applications has at leas percent nucleic acid sequence identity to nucleotide sequence that encodes amino acid sequence selected from amino acid sequence group. Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Ge Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z; 0 Query Match
Best Local Similarity 100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Claim 2; SEQ ID NO 375; 637pp; English. 09-DEC-1999; 99US-0170262P. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072. 17-APR-2002; 2002US-00124815 (GETH) GENENTECH INC WPI; 2003-801137/75. P-PSDB; ADC58527. US2003087346-A1 Homo sapiens 08-MAY-2003 g $\dot{\delta}$ g ò g ઠ

Db 1321 AAGAATACTTTGGGGGAAAAGGTTTTAAA Oy 1381 TTTAGGTACAATGGGGGGAAAAGGTTTTTAA Db 1381 TTTAGGTACAATGGAGTTTTTTTCCCAAA Oy 1441 CCCACTGCAAGCTGCATCGTGCAACCTCTTT CCACTGCAAGCTGCATCGTGCAACCTCTTT Oy 1501 TCTGCCCACAGAGTGCCCCCACTGGAACAT Db 1501 TCTGCCCACAGAGTGCCCCCACTGGAACAT Oy 1561 GTCCATAGAGAGTGCCCCCACTGGAACAT Oy 1561 GTCATAGAGAGAATGAACACTTCC Oy 1621 GTAGACTGTGCCACAGGGAATGAACCTTCC Oy 1621 GTAGACTGTGCCACAGGGGTGTTTTTAA	747	NS Homo sapiens. XX US2003105288-AM. XX US2003105288-AM. XX D5-JUN-2003. XX
241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCGGGAGGGGAGAGGCCACCCTCAG 300 241 CACCTTCCCCCAAAGCTATGGACAACGTGACGGTCGGCAGGGGGAGAGCGCCACCCTCAG 300 301 GTGCACTATTGACAACCGGGTCACCCGGGTGGCTGGCTAAACCGCACCCTCCTA 360 301 GTGCACTATTGACAACCGGGTCACCCGGGTGGCTGGCTAAACCGCACCCTCTA 360 361 TGCTGGGAATGACAACCGGGTCACCCGGGTGGCTGGCTGG	CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACTCTCCCCAAAGC CTGCATAGCAATGGTAGACCCAGAGCCTACGGTTACTTGGAGACACCTCTCCCCCAAAGC CTGCATAGCAACTGGTAGACCAGGCCTACGGTTACTTGGAGACACCTCTCTCCCCAAAGC GGTTGGCTTTGTGAGTGAGAGACAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC AGGGGACTACGAGTGCAGTGC	901 CAGGGATGALADAGACGATGATTGAAAGGGGTGAAAGGGGTGAAAGGGGTGAAAGGGGTGAAAGGGGTGAAAGGGGTGAAAGGGGTGAAAGGGGTGAAAGGGGTGAAAGGGGTGAAAGGGGAAAAGGGGTGAAAGGGGAAAAGGGGTTT 960 961 CCTCTCAAAACTGATCTTCTAATGTCTGAACATGGAACTACACTTGCGT 1020 1021 GGCCTCCAAAACTGATCTTCTTCAATGTCTGAACATGGGAACTACACTTGCGT 1020 1021 GGCCTCCAAAACTGATCTTCTTCAATGTCTTGAACATGGGAACTACACTTGCGT 1020 1021 GGCCTCCAAAACTGATCTTCTTCAATGTCTTGAACATGGGAACTACACTTGCGT 1020 1021 GGCCTCCAAAACTGACACGGCCACCACAGGATGACTATTGGGCCAGGCGCGT 1080 1021 GGCCTCCAACACACACACACACACACACACACACTACTATTGGTCCAGGCGCCGT 1080 1031 CAGCGAGGTGAGCAACGGCCACCACACACACACACTACTATTTGTTCTTTTT 1140 1041 GGCTCTTGCAACGGCACGTCGAGGGGCAGCTGCCTTCTCTTTTT 1140 1051 GGCCTCCAACACACACACACACACACACAGCACTACCACTCCCCACCCGGGAAAGGCT 1200 1141 GGTCTTGCACCTCCAACACACACACACACACACTACCACTTCCCCACCCGGGAAAGGCT 1200 1141 GGTCTTGCACCTCCAACACACACACACACACACACTACCACACTCA
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ACGGGAAGACACAGCACACCCGCTTGGA 1440 TRGTGCCAGTGTGGGCAAGGCTCAGCCTC 1500 ATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560 CGGCCCAAGCGTGGCGCTGCGGGCACTTTG 1620 CCGCCCAAGCGTGCCCTGCGGCCACTTTG 1620 otein, PRO; gene; ss; cytostatic; bll proliferation; rocyte cell proliferation; nour necrosis factor alpha release; st cell proliferation; on inhibitor; tumour; lung tumour; be tumour; rectal tumour; ome mapping; gene mapping; ecreted and transmembrane antly producing a PRO polypeptide, therapy. Goddard A, Godowski PJ; ephan JF, Watanabe CK, Wood WI; O (secreted and transmembrane) 187 or PRO1329 polypeptide are protein PRO337 cDNA.

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cc useful for stimulating the proliferation of or gene expression in pericyte cells. PR0357, PR0229, PR01272 or PR04405 polypeptide are useful for stimulating the proliferation or differentiation of chondrocyte cells. PR0351, PR0725, PR01155, PR01105, PR01419 polypeptide are useful for stimulating the release of tumour necrosis factor (TNF)-care useful for stimulating the release of tumour necrosis factor (TNF)-care pr0247, PR0137, PR0136, PR0130, PR0130, PR0130, PR0130, PR0130, PR0130, PR0130, PR0130, PR0131, PR
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Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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sequence levy br; 498 A; 432 C; 419 G; 330 I; 0 U; 0 Ocner;	Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0; Gaps	1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGGCAACAC	1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC	61 AATCTATCAGGAAAGAAAGAAAAAAAAACGAAACCTGACAAAAAAAA	61 AATCTATCAGAAAGAAAGAAAGAAAAAAACCGAACCTGACAAAAAAAA	121 AAGAAAAAAAACGTGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT	121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT	181 CTTCACGGGCTGCTGCTCTGTGTCTCTCTAAGGAGTGCCCGTGCGCAGCGGAGATGC	181 CTTCACGGGGCTGGCTCTCTCTTCCTACGAGTGCCCGTGCGCAGCGGAATGTGC	241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGAGGGGAGGCGCCACCCTCAG	241 CACCTICCCCAAAGCTAIGGACAACGTGACGGTCCGGCAGGGGGGGGGG	301 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA	301 GIGCACTATTGACAACCGGGTCACCCGGGTGGCTTGGCTAAACCGCAGCACCATCTTA	361 TGCTGGGAATGACGAGGGGGCTGCTGGATCCTCGGGGGGCAACACCCGAAAC	361 IGCTGGGAATGACAAGTGGTGCCTGGATCCTCGGTGGTCCTTCTGAGCAACACCCAAAA	421 GCAGTACAGCATCGAGAATCCAGAAAGGTGGATGTATGACGAGGGCCCTTACACCTGCTC	421 GCAGTACAGCATCGAGAATCCAGAAAGTGGAATGTGTATAGACGAGGGCCCTTACACCTGCTC	481 GGTGCAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC
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q	CATAGCAACTGGTAGACCAGAGCCTACGGTTACTT	CACATCTCCCCAAAG
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ò	AGGGGACTACGAGTGCAGTGCAAAGACGTGGCGGC	CCGTGGTACGGAGAGTAAA 78
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ò	321 AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAGAAAA	GAAAATTGCCTTGCAGATA 138
d	gaatactttggggggaaaagagttttaaaaaag	SAAATTGCCTTGCAGATA 138
à	rggagttttcttttcccaaacgggagaa	ACAGCACACCCGGCTTG
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ò	ACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGT	GCAAGGCTCAGCCTC 150
d	cactigcaagetigcategtigeaacetetttiggtigeeagt	3GGCAAGGGCTCAGCCTC 150
ò	501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCT	CCCAAATTCAATCA 156
셤	501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGC	ATCCCAAATTCAATCA 156
ò	1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCC	

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WPI; 2003-801169/75.
P-PSDB; ADD03201.
1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTG 1620
              1621 GTAGACTGTGCCACCACCACGGCGTGTGTTGTGAAACGTGAAATAAAAAAGAGCAAAAAAA 1679
                                                                                                                                   Human; secreted and transmembrane protein; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; tochondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose uptake modulator; FRA uptake modulator; cell proliferation; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia; immune system cell infiltration; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker; gene; ss.
                                                                                                                       Novel human secreted and transmembrane protein PRO337 cDNA.
                                                                        ADD03200 standard; cDNA; 1679 BP
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98WO-US014552.
98WO-US017888.
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Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
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14-JJN-2001; 2001US-0088256.

19-JJN-2001; 2001US-00886342.

20-JJN-2001; 2001US-00887879.

22-JJN-2001; 2001WO-US021016.

29-JJN-2001; 201WO-US021066.

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18-JJL-2001; 2001US-00908827.
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20-MAR-2000;
21-MAR-2000;
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31-MAY-2000;
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11-FEB-2000;
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Transmenbrane polypeptides on antibody which specifically binds to a PRO polypeptide, a machod for similating the release of tumour necrosis factor-alpha, from human blood, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for proliferation or differentiation of chondrocyte cells and a method for colon, breast, prostate, rectal, kidney, cervical and liver tumous). The proliferation probes, in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides by recombinate techniques and in generating either transgenic animals or knock-out animals which are consistent and screening of therapeutically useful reagents. The PRO polypeptides by recombinate techniques and in medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of the stimulating discondition responsive to the polypeptides or antibodies, such as tumours, for stimulating the uptake of stimulating proliferation of or stimulating the proliferation of or gene expression in pericyte cells, for stimulating proliferation of or gene expression in pericyte cells, for stimulating proliferation of continued as sports injuries or traking various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of for problems, articular cartilage defects, osteoarthritis and rheumatoid continued and arthritis proliferation of or gene expression of continued should be and of continued and assembly articular cartilage are also useful for treating sports related joint problems, articular cartilage are also useful for treating sports related joint problems, articular expresence and arthritis proposally and proposally and proposally and propo 유디 New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 PRO4978, useful in molecular biology, chromosome and gene mapping, generating antisense RNA and DNA, and in gene therapy. invention relates to isolated human PRO polypeptides Claim 2; Fig 375; 638pp; English.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Query Match

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120 180 180 240 240 300 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCTTCTGAGCAACACCCAAAC 420 300 GIGCACTAITGACAACCGGGICACCCGGGIGGCCTGGCTAAACCGCAGCACCAICCICTA 360 grecactarrascascedercaccederecerrecerascederaceaecaceaecerera 360 9 9 GITGTGTCCTTCAGCAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC <u>CTTCACGGGGCTGGCTGCTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC</u> CACCTICCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT CTTCACGGGGCTGGCTGTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGAGATGC Gaps ö 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; cive 0; Mismatches 0; Indels 0; Best Local Similarity 100. Matches 1679; Conservative 181 241 181 241 301 301 361

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1020 1020 1080 1080 1140 1140 1320 1380 GCCGCCACCACCACCACCACACACAACAGCAATGGCAACACCGACAGCAACCAATCAGATA 1260 AAAGAATACTTTGGGGGGAAAAGAGTTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA 1380 GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT 1200 960 099 099 960 540 900 600 720 780 780 840 900 900 480 720 GCGGCCACCACCACCACCAACAACAGCAATA 361 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC CAAAATTGTAGAGATTTCTTCAGATATCTCCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGAGCCTAACGTTACTTGGAGACATCTCTCCAGAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCCGGGAGCAGTC **AGGGGACTACGAGTGCCATGCCTCCAATGACGTGGCCGCGCCCGTGGTACGCGGAGAGTAAA** GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGGTGAAAAGTGGAAAACAGACCTTT CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT TITIAGGIACAAIGGAGIITIICIITIICCCAAACGGGAAGAACACAGCACCCGGCTIGGA TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACAGCACACCCGGCTTGGA CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCCAGTGTGGGCCAAGGCTCAGCCTC 421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGCCCTTACACCTGCTC GGTGCAGACAGACCACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC GGTGCAGACAGACAACCACCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC **AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCCCGTGGTACGGAGAGTAAA** GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CCTCTCAAAACTCATCTTCTAATGTCTCTGAACATGACTATGGGGAACTACACTTGCGT CAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGGTCTGGCTGCTGCTCTTCT GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGGTGAAAGTGGAAAACAGACCTTT CAGCGAGGTGAGCAACGTCGAGGAGGGCAGGCTGCGTCTGGCTGCTGCCT 481 481 541 661 841 841 1021 1081 1141 1141 1201 1201 1261 1321 721 781 901 1021 1081 1261 1321 1381 1381 1441 601 601 661 721 781 961 961 421 901 g ò g 8 8 요 수 요 B & g ద d d \$ g ઇ g 셤 ò g ò g ò 8 Ωp 8 8 8 ò ò ठ ठे 8 셤 ઠે

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Human; secreted and transmembrane protein; PRO; gene; ss;
Tumour necrosis factor alpha release; TNF-alpha release;
glucose uptake modulator;
cell proliferation etimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
lung tumour; colon tumour; breast tumour; prostett tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           transmembrane) polypeptides (1). (1) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation of udifferentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of Theorem and in pericyte stimulating the proliferation of Thy for stimulating the proliferation of Thyphocyte cells, for stimulating the release of a cytokine from PBMC cells, for inhibiting the binding of A-peptide to factor VITA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonucleotide probes
                                      1621 GTAGACTGTGCCACCACGGCGTGTTGTGAAACGTGAATAAAAGAGAGAAAAAA 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention describes 305 nucleic acids encoding PRO (secreted and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        useful for manufacturing a medicament for
                                                                                                                                                                                                                                                                       Novel human secreted and transmembrane protein PRO337 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; SEQ ID NO 375; 637pp; English.
                                                                                                                                              ADC90192 standard; cDNA; 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New PRO nucleic acid, useful diagnosing or treating tumor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUN-2000; 2000US-0209832P.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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                                                                                                                                                                                                                                 01-JAN-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
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                                                                                                                                                                                        ADC90192;
                                                                                                       RESULT 57
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are useful for isolating genomic and cDNA nuclectide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. A polymuclectide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and screening of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This sequence encodes a novel human secreted and transmembrane PRO polypeptide.
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cDNA encoding human PRO polypeptide #188 B ADC69611 standard; cDNA; 1679 (first entry) 01-JAN-2004 ADC69611; RESULT :
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transmembrane polypeptide; Human; gene; ss; PRO; secreted polypeptide; transmembrane polypept. tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;

cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; hemoglobin-associated disorder thalassaemia; immune system cell infiltration.

Homo sapiens.

JS2003194770-A1.

16-OCT-2003

21-MAY-2002; 2002US-00152375.

03-MAR-2000; 2000US-0187202P. 30-MAY-2000; 2000WO-US014941. 01-DEC-2000; 2000WO-US32678. 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Gao Beresini M, Deforge L, Desnoyers L, Filvaroff E, G MB, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z; Stewart TA, Gerritsen ME, Baker KP, Smith V,

2003-844453/78. WPI; 2003-844453/ P-PSDB; ADC69612 New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for the diagnosis, prevention and/or treatment of tumors, such as lung, colon, breast, prostate, rectal, cervical and/or liver tumors.

Claim 2; Fig 375; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TMF-alpha) from human blood, a method for stimulating the prosider to detecting the presence of a tumour in a mammal (e.g. adream). Humsy, cervical and liver tumours). The prolymucleotides are useful in molecular biology, including uses as hypridisation probes, in chromosome and gene mapping, in generating an increames RNA and BNA and in gene therapy. The polymucleotides may also a trisense RNA and BNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapoutically properties or antibodies are used in preparing a tumours, for stimulating of the proliferation of condition responsive to the polypeptides or antibodies are used in preparing of thuman microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells, for stimulating differentiation of adpocyte cells, for stimulating cells or T-lymphocyte cells, for timulating differentiation of alphocyte cells, for stimulating carbains of inner ear utricular supporting cells, for T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various mammalian hasmoglobin-associated disorders such as various thalassaemias and condition. Note: The sequence encodes a human PRO polypeptide of the invention. Note: The sequence encodes a human PRO polypeptide of the invention. On the property of the USPTO website at sequence encodes a human PRO polypeptide of the invention. %\$CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tummour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tummour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FPA; skeletal muscle cell; adipocyte cell; periotte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.

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09-DEC-1999; 99US-0170262P.
30-MAY-2000; 2000WO-US014941.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
(GETH ) GENENTECH INC.
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Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W; Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-844455/78. P-PSDB; ADC48501. New secreted and transmembrane PRO nucleic acids and polypeptides, useful for detecting a tumor, stimulating the release of tumor necrosis factor alpha and stimulating the proliferation of endothelial cells.

Claim 2; Fig 375; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adremal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses a prisense RNA and bnA and in gene therapy. The polymucleotides may also antisense RNA and bnA and in gene therapy. The polymucleotides may also consider in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening or knock-out animals which are useful as tumours, for stimulating or inhibiting proliferation of thuman microvascular endothelial cells, for modulating the uptake of glucose or PRA by skeletal muscle cells, for modulating the uptake of stimulating differantiation of inner ear utricular supporting one of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for modulating the uptake of stimulating endothelial cells to trating various mammals and contitions which criticals are useful for treating various mammals and condition. The sequence represents a human PRO plymucleotide of the invention. For midulation of sequence represents a human PRO plymucleotide of the invention. The sequence represents a human PRO plymucleotide of the invention. The sequence represents a purport sequence represents a pu

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other

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1140 1140 1080 1080 1200 GCCGCCACCACCACCACCAACACACAATGGCAACACCGACAGCAACCAATCAGATA 1260 1320 960 420 480 480 540 900 900 999 999 720 780 780 840 840 900 900 960 360 420 720 240 300 300 GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCGGGAAAGGGCT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT AGGGACTACGAGTGCAGTGCCTCCCAATGACGTGGCCGCGCCCTGGTACGGAGGTAAA GGTCACCGGGAACTATCCACCCATACATTTCAGAAGGCAAGGGTACAGGGTGTCCCCGTGGG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGGT CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACATGCGT GGTGCAGACAGCACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC GGTGCAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC AGGGACTA CGAGTGCATGCCTCCAATGACGTGGCCGCCGCCCGTGGTACGGAGGTAAA CAAAATTGTAGAGATTTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGAGCCTACGTTACTTGGAGACATCTCTCCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC GGTCACCGTGAACTATCCACCATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCAAAC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC CTCCCAAAGC CTTCACGGGGCTGGCTGTGTGTCTCTTCCAAGGAGTGCCCGTGCCGGCGGAGATGC CACCTTCCCCAAAGCTATGGACAACGTGCGGCAGGGGAGGGGAGAGCGCACCCTCAG GIGCACIAITGACAACCGGGICACCCGGGIGGCCIGGCIAAACCGCAGCACCATCCICIA CTICACGGGGCTGCTGTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACACT 196 1141 1261 1021 1081 1081 1141 1201 841 901 901 196 1021 541 199 781 841 181 241 301 361 121 \$21 481 481 541 601 199 721 721 781 241 301 361 601 181

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; heemoglobin-associated disorder thalassaemia; immune system cell infiltration.
                                                                                                               New secreted and transmembrane PRO nucleic acids and polypeptides, us for detecting a tumor, stimulating the release of proteoglycans from cartilage and inhibiting the differentiation of adipocyte cells.
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4E, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
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01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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Smith V, Stewart TA,
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P-PSDB; ADD10030.
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TRP-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidhey, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as an interacting properties of polymedisation probes, in chromosome and gene mapping, in generating an expensive prolypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are cuseful in the development and screening of therapeutically useful respensive to the polypeptides or antibodies are used in preparing a medicament for treating acreening of therapeutically useful responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of antibodies, such as tumours, for stimulating and inhibiting proliferation of confirmance cells, for stimulating the uptake of glucose or PRA by skeateal muscle cells, for stimulating cells, for inducing endothelial cells, for modulating the uptake of confirmation of anglocyte cells, for stimulating cells, for inducing endothelial cells, for stimulating cells or T-lymphocyte cells, for inducing endothelial cells, for stimulating cells or transmission of arthritis and returning cells or transmission are and/or cartilage disorders such as sports injuries and arthritis and propertides are also useful for treating sports-related joint problems, arthritis promoted disorders such as various humane and and prove cells, for enthalphared loss of polypeptides are also useful for treating sports-related joint problems, acquance represents a human prolypolyment is allow availabl
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100.0%; Score 1679; DB 1;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0;
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                      Claim 2; Fig 375; 637pp; English.
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GCAGTACAGCATCGAGATCCAGAACGTGGTATGACGAGGGCCCTTACACCTGCTC

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The invention describes an isolated PRO (secreted and transmembrane)

CD polypeptide (I). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are

C useful for atimulating the proliferation of or gene expression in

CC sells. PRO357, PRO229, PRO1272 or PRO4405 polypeptide are useful

CC for stimulating the proliferation or differentiation of chondrocyte

CC ells. PRO357, PRO355, PRO155, PRO1105 or PRO1419 polypeptide

are useful for stimulating the release of tumour necrosis factor (INF)-

alpha from human blood. PRO982, PRO157, PRO125, PRO11080,

CRO1025, PRO1181, PRO126, PRO1186, PRO1192, PRO1171, PRO1411, PRO11080,

CC PRO1025, PRO1181, PRO1126, PRO1192, PRO1274, PRO1379,

CC PRO1286, PRO130, PRO353, PRO353, PRO1273, PRO1274, PRO1141,

CC PRO1986, PRO1330, PRO534, PRO1309, PRO1474, PRO1374, PRO1327,

CC PRO1987, PRO1330, PRO4341, PRO1801, PRO1411, PRO1411, PRO1412,

CC PRO1987, PRO1330, PRO9346, CC PRO1080, PRO4444, PRO3544, PRO4322,

CC PRO940, PRO6079, PRO9836 or PRO11096, PRO1313, PRO3543, PRO3444, PRO4322,

CC PRO940, PRO529, PRO788, PRO1184, PRO1272, PRO1488, PRO4408,

CC PRO5723, PRO5725, PRO7154, or PRO1402 PRO1488, PRO4312, PRO1314, PRO1272, PRO1488, PRO1314, PRO1322,

CR PRO5723, PRO5725, PRO7154, or PRO7425 polypeptide are useful for
               GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCCAAGCGTGGCGCTGCGGGCACTTTG 1620
                                                                                                    Gerritsen ME, Goddard A, Godowski \mathtt{PJ}_i Smith \mathtt{V}_i Stephan \mathtt{JF}_i Watanabe CK, Wood WI;
                                     1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGGGGCGTGCGGGCACTTG
                                                                                                                                                                                                                                                                                                                                 Human; secreted and transmembrane protein; PRO; gene; ss; cytostatic;
                                                                                 vulnerary; antiarthritic; pericyte cell proliferation; pericyte cell differentiation; chondrocyte cell differentiation; chondrocyte cell proliferation; chondrocyte cell proliferation; (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell proliferation; dermal fibroblast cell proliferation; colon tumour; breat tumour; prostate tumour; prostate tumour; rectal tumour; lissue typing; chromosome mapping; gene mapping;
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molecular weight markers, for treating arthritis and tumor.
                                                                                                                                                                                                                                                                                               Novel human secreted and transmembrane protein PRO337 cDNA
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                                                                                                                                                                                                ADC78072 standard; cDNA; 1679
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29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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Grimaldi JC, Gurney
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P-PSDB; ADC78073.
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gene therapy,

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inhibiting the proliferation of normal human dermal fibroblast cells. PRO polypeptides such as PRO6004, PRO4981, PRO7174, PRO5778, PRO4332, etc., are useful for detecting the presence of tumour in a mammal which involves comparing the level of expression of the above PRO polypeptides in a test sample of cells taken from the mammal, and a control sample of normal cells of the same cell type, where a higher level of expression of the PRO polypeptides in the test sample as compared to the control sample is indicative of the presence of tumour in the mammal. The tumour is lung tumour, colon tumour, breast tumour, prestate tumour, rectal tumour or liver tumour. (I) is useful as molecular weight markers, for tissue typing, or as therapeutic agents. A polymolectide (II) encoding (I) is useful for chromosome and gene mapping or gene therapy. (II) is useful cor generating transgenic animals or knock-out animals which are useful screening useful reagents. PRO357, PRO229, PRO1272 or PRO4405 polypeptide sport injuries). This sequence encodes a human secreted and transmembrane below.
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Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

S	Sequence 1679 BP;	498 A; 432 C		
Sag	Query Match Best Local Si Matches 1679;	100.0%; Score 1679; DB 1; Length 1679; Similarity 100.0%; Pred. No. 6.7e-05; 9; Conservative 0; Mismatches 0; Indels 0; Gaps	0;	
à	н	GTIGIGECCTICAGCAAAACAGGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 6	09	
q _C	н	-u	60	
à	61	AATCTATCAGGAAAGAAAGAAAGAAAAAAACCGAACCTGACAAAAAAAGAAGAAAAAAAGAAG	120	
g	61		120	
ò	121	AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 10	180	
qq	121	AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 1	180	
δ	181	CTTCACGGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGTGC 2	240	
a D	181	CACGGGCTGCTCTTCTTCCAAGGAGTGCCCGTGCGCAGCGGAATGC	240	
à	241	CACCTTCCCCAAAGCTATGGACAACGTCCGGTCCGGCAGGGGAGAGCGCCCACCCTCAG 3	300	
qq	241	CACCTICCCCAAAGCTATGGACAACGTGCGGCAGGGGGGGGAGAGCGCCACCCTCAG 3	300	
È	301	GIGCACTATIGACCACCGGGTCACCCGGGTGGCTCACAAACCGCAGCACCATCCTCTA 3	360	
g	301	m	360	
à	361	TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAAC 4:	420	
ф	361		420	
8	421	GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGCCCTTACACCTGCTC 4	480	
g	421	4	480	
ò	481	GGTGCAGACAGCACCAAAGCCTCTAGGGTCCACCTCATTGTGCAAGTATTCTCC 5	540	
gg	481		540	
à	541	CAAAAITGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 6	600	
eg G	541		009	
ઠ્ઠ	601	CTGCATAGCAACTGGTAGACCCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 6	099	
g	109		099	
à	661	GGTTGGCTTTGTGAAGAGGAGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 7.	720	
g	661		720	
ò	721	AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA 7	780	

q	721	
ò	∞ .	4.
8 8	781	GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 840 acaaaaagaacaacaacaacaagaaaagcaacaagaagaa
3 8	י קי	CAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 90
ò	901	AAAGAAAGGGGTGAAAAGTGGAAAACAGACCTTT 96
QQ	0	960
දු දු	961	CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGGAACTACACTTGCGT 1020 CCTCTCAAAACTCAACTTCTTCTTCTTCTTCTTGAACATGACTAATGGGAACTTACACTACTTTCTTCTTCTTCTTGAACATGACTAATGGAAACTAAAATGAAAATGAAAATGAAAATGAAAAATGAAAAATGAAAAATGAAAAATGAAAAATGAAAAATGAAAAATGAAAAATGAAAAATGAAAAATGAAAAATGAAAAATGAAAAATGAAAAAA
} }	0	CTCCAA CAAGCTGGGCCAACCAATGCCAGCATGTTTTGGTCCAGGGGCCGT 108
4 0	02	08
ò	1081	CAGCGAGGTGAGCAAACGGCACGTCGAGGAGGGCAGGCTGCTGCTGCTGCTGCTCTTCT 1140
qa .	1081	CAGGGAGGTGACGCACGTCGAGGGCGCGCGCGCGTCTGGCTGCTGCTTTTTTTT
ò	4	20
đ	1141	TTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT
δ	1201	GCGCCACCACCACCACCACCAACAGCAATGGCAATGGCACACGACAGCAATCAGATA 1260
qq	1201	GCCGCCACCACCACCAACACAACAGCAATGGCAACACCGACAGCAACCAATCAGATA 1260
ò	1261	TATACAAATGAAATTAGAAGAAACACAGCCTCATGGGACAGAAATTTGAGGGGGGAAC 1320
đũ	1261	JAAATGAAATTAGAAGAAACACAGCCT
λō	1321	AAAGAATACTTTGGGGGAAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA 1380
OP	1321	rttgggggaaaagatttaaaaaagaaattgaaaattg
È	1381	TITAGGIACAATGGAGITITCITITCCCAAACGGGAAGAACACACACACACACGGCTIGGA 1440
do	1381	ittagótacaridáadititettiteeeaaedagaagaacaeaeaeaeaeaea 1440
λΌ	1441	CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC 1500
qq	1441	cccacrecaacrecarcerecacrecitrisereccaeresecaacecaecreaecere
ò	1501	TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560
ОÞ	1501	CTGG
λ	1561	GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTG 1620
ΟD	1561	
ò	1621	GTAGACTGTGCCACCACGGCGTGTGTGAAACGTGAAATAAAAAAGGAAAAAAA 1679
qq	1621	TGTGCCAC
RESUL ADDO4 ID	LT 62 14604 ADD04604	Btandard; cDNA; 1679 BP.

ADD04604 standard; cDNA; 1679 BXXXXBXB

ADD04604;

01-JAN-2004 (first entry)

Novel human secreted and transmembrane protein PRO337 cDNA.

Human; secreted and transmembrane protein; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endochalial cell; glucose uptake modulator; FFA uptake modulator; cell proliferation; pericyte cell; inner ear utricular supporting cell; Tymphocyte cell; endochalial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; hemumatoid arthritis; haemoglobin-associated disorder; halassaemia; immune system cell infiltration; chromosome mapping; gene therapy; chromosome identification; chromosome marker; gene; ss.

Homo sapiens.

US2003087354-A1.

08-MAY-2003

22-APR-2002; 2002US-00127827

99WO-US012252. 99US-00380137. 2000WO-US008439. 98US-0096891P 17-AUG-1998; 02-UUN-1999; 25-AUG-1999; 30-MAR-2000; 30-MAY-2000; 01-DEC-2000; 19-DEC-2001;

2000WO-US014941. 2000WO-US032678. 2001US-00028072.

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G. Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

3 Gao

WPI; 2003-801139/75. P-PSDB; ADD04605.

New PRO nucleic acid, useful for manufacturing a medicament for diagnosing or treating tumor.

Claim 2; Fig 375; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the problitication or differentiation of chondrocyte cells and a method for colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The cells in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are useful for medicament for treating a condition responsive to the polypeptides or antibodies or projected or stimulating projiferation of stimulating and inhibiting the uptake of glucose or FFA (free fatty acid) by skeletal muscle cells, for stimulating the proliferation of inner are utricular supporting cells or stimulating proliferation of inner are utricular supporting cells, for traating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating various thalassaemias mammalian haemoglobin-associated disorders such as various thalassaemias

ö 540 540 840 9 720 720 840 120 180 300 300 360 360 420 420 480 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 480 900 600 9 780 900 900 960 9 and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polymucleotide of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at seqdata.uspto.gov/sequence.html. Gerrescrirereacreaacaceaaracriceaaarreacaarreacecareacecegeaecae CACCITCCCCAAAGCIATGGACAACGTGACGGTCCGGCAGGGGGAGAGGGCGCCACCCTCAG GIGCACTATIGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCA GGTGCAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCCCAAAGC crecaraccaacregragaccaaaaccraceerracrineaaaacacarcreccaaaac **AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA** GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG GITGIGICCTICAGCAAAACAGIGGAITIAAAICTCCTIGCACAAGCTIGAGAGCAACAC **AATCTATCAGGAAAGAAAGAAAGAAAAAACCGAACCTGACAAAAAAAGAAAAAAAGAAG** AAGAAAAAAATCATGAAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT cricaceeeecreecrererererererereaseaseaeceereceaeceeaeaaree CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC recresearidacaagreeresarecrescereserecristereascaacaacaacaaac **GGTGCAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC** CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC **GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC** GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 841 ACABARGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGAAAACAGACCTTT CTTCACGGGGCTGCTGTGTGTCTTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GITGTGTCCTTCAGCAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC ő 100.0%; Score 1679; DB 1; Length 1679; llarity 100.0%; Pred. No. 6.7e-05; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Best Local Similarity Matches 1679; Conserv 541 541 781 241 361 361 421 481 109 601 661 721 721 781 -121 181 181 241 199 н 61 121 301 301 421 481 901 Query Match ន្តន្តន្តន្ត 셤 ď ď ö g ð 셤 ò 셤 ð g ò 셤 6 8 8 원 경 원 रु ध रु 엄 g Š 셤 à ò δ 8

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human; secreted and transmembrane protein; PRO; gene; ss; cytostatic;
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                                                                                                                                   Novel human secreted and transmembrane protein PRO337 cDNA
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Comparation cascribes an isolated RPO (secreted and transmenderate)

Comparation cascribes an isolated RPO (secreted and transmenderate)

Comparation cascribes an isolated RPO (secreted and transmenderate)

Comparation cascribes an isolated RPO or gene expression in comparation comparation of chondrocyte cells. PRO257, PRO225, PRO1305 or PRO1419 polypeptide are useful for stimulating the release of tumour necrosis factor (TNF).

Comparation Exposor, PRO357, 
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bhan JF, Watanabe CK, Wood WI;
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Smith V, Stephan JF,
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                                                                                                                               01-JUN-2001; 2001WO-US017800.
29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
                                                                                        26-AUG-2002; 2002US-00227873
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Grimaldi JC, Gurney AL,
                                                                                                                                                                                                                            (GETH ) GENENTECH INC.
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01-DEC-1999; 99WO-USO26634.
22-FEB-2000; 2000WO-USO4414.
01-DEC-2000; 2000WO-USO38678.
19-DEC-2001; 2001US-00028072.
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Gerritgen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z; WPI, 2003-801168/75.
P-PSDB; ADC80561.
New isolated nucleic acid encoding a PRO polypeptide, e.g. PR01114 or PR04978, useful in molecular biology, chromosome and gene mapping, in generating antisense RNA and IN gene therapy.

Claim 2; Fig 375; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for proliferation presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The prolymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating colon, breast, proceed in chromosome and gene mapping, in generating shybridisation probes, in chromosome and gene mapping, in generating or colon, breast, procedular proportides by recombinant techniques and in genetating either transgenic animals or knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening or knock-out animals which are useful in the development and screening or knock-out animals which are useful in the development and screening or knock-out animals which are useful in the development and screening or antibodies such as tumours, for stimulating and inhibiting proliferation of multiple and inhibiting the uptake of glucose or FRA (free fatty acid) by skeletal muscle cells for stimulating differentiation of adipocyte cells, for stimulating differentiation of angene supression in pericyte cells, for stimulating differentiation of adipocyte cells, for inducing endothelial cell tube formation and for trating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of problems, articular cartilage are also useful for treating sports related joint infiltration. This sequence are useful for treating sports and condition which may benefit from enhanced

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

120 120 180 180 240 240 300 300 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 360 9 9 121 AAGAAAAAATCATGAAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 1 GITGIGICCITCAGCAAAACAGTGGAITITAAAICTCCTTGCACAAGCITGAGAGCAACAC AATCTATCAGGAAAGAAAGAAAGAAAAAAACCGAACCTGACAAAAAAAGAAAAAAGAAG 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT CACCTTCCCCAAAGCTATGGACAACGTGACGTCCGGCAGGGGGGAGAGCGCCACCTCAG GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC Gaps . 0 Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0; 61 61 181 181 241 301

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                                                                                                     TCTGCCCACAGAGTGCCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560
                                                                                                                                           GTCCATAGAGACGAACGACCTTCCGGCCCCAAGCGTGGCGCTGCGGGGACTTTG 1620
                                                                                                                                                                                                 New secreted and transmembrane PRO nucleic acids and polypeptides, useful for detecting a tumor, stimulating the proliferation or differentiation of chondrocyte cells and stimulating the release of tumor necrosis factor
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                             CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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Gerritsen ME, Goddard
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the

Claim 2; SEQ ID NO 375; 637pp; English.

standard; cDNA; 1679

RESULT 66 ADD10344

ADD10344; ADD10344

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The invention relates to an isolated mucleic acid encoding a secreted and transmembrane polypeptide (PRO). The nucleic acid, a polypeptide encoded by the nucleic acid, or an agonist or antagonist, is used to treat a cardiovascular, endothelial, or angiogenic disorder in a mammal, preferably a human. The human may have suffered a myocardial infarction or has cardiac hypertrophy, trauma, a cancer, or age-related macular degeneration. The cardiac hypertrophy is characterised by the presence of an elevated level of PGF-2 alpha. A PRO polypeptide, given in the specification, or an agonist is used to inhibit or stimulate endothelial cell growth in a mammal. PRO21 or an agonist is used to induce cardiac hypertrophy. PRO1376 or PRO149 is used to stimulate angiogenesis. PRO4302 or an agonist is used to induce endothelial cell apoptosis. A PRO polypeptide, given in the specification, or an agonist is used to crimilate or inhibit smooth muscle cell growth, or to induce endothelial cell tube formation. The present sequence represents a cDNA encoding a PRO polypeptide of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated nucleic acid encoding a secreted and transmembrane polypeptide for treating a cardiovascular, endothelial, or angiogenic disorder in a mammal, such as cancer or age-related macular degeneration.
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                                                                                                                                                    se; gene; human; secreted protein; transmembrane protein; cardiovascular disorder; endothelial disorder; angiogenic di myocardial infarction; cardiac hypertrophy; trauma; cancer; age-related macular degeneration; angiogenesis; endothelial cell apoptosis; smooth muscle cell growth; endothelial cell tube formation.
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J, Hillan KJ, Marsters SA, Pan J,
PM, Wood WI, Ye W;
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100.0%; Pred. No. 6.7e-05;
tive 0; Mismatches 0;
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                                                                                                                    PRO
                                                                                                                    Human secreted/transmembrane
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20-UUN-2001; 2001UO-US019692.
09-UUL-2001; 2001WO-US021735.
20-FEB-2002; 2002US-000810S6.
                                                                                                                                                                                                                                                                                                                                                                                                                 16-AUG-2002; 2002US-00223084
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Godowski PJ, Gurney AL, H
Watanabe CK, Williams PM,
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Matches 1679; Conservative
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P-PSDB; ADD10345.
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61 AATCTATCAGGAAAGAAAAAAACCGAACCTGACAAAAAAAGAAAAAAGAGAA 120 61 AATCTATCAGGAAAGAAAAGAAAAAACCGAACCTGACAAAAAAAA	601 CTGCATAGCAACTGGTAGACCTAACGCTTACTTGGAGACACTTCTCCCAAAGC 660 601 CTGCATTAGCAACTGGTAGACCAGAGCCTAACGTTACTTGGAGACACTCTCTCCCAAAGC 660 601 CTGCATTAGCAACTGGTAGACCAGAGCCTTCGTTACTTGGAGACACTCTCTCCCCAAGC 660 661 GGTTGGCTTTGTGAGTGAAGACCAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 720 661 GGTTGGCTTTGTGAGTGAAGACCAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 720 721 AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCAGCATCACCCGGGAGCAGTAAA 780 721 AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCGCG

Š Smith Gurney SL, Z, PJ, Gurney AL, Wood WI, Zhang Goddard A, Godowski mas D, Watanabe CK, Gerritsen ME, Goucater Tannas D,

WPI; 2003-844454/78.

New secreted and transmembrane PRO polypeptides and nucleic acids useful for detecting a tumor, stimulating the release of proteoglycans from cartilage and stimulating the proliferation of endothelial cells.

Claim 2; Fig 375; 637pp; English

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the colypeptide, a method for stimulating the polypeptide, a method for stimulating the polypeptide (TWF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses a hybridisation probes, in chromosome and gene mapping, in generating cartisense RNA and in gene therapy. The polymucleotides may also cartisense RNA and in gene therapy. The polymucleotides may also cartisense RNA and in gene therapy. The polymucleotides may also cartisense RNA and in gene therapy. The polymucleotides may also careful in molecular and screening or knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of therapeutically useful casgents. The RNO polymeptides or antibodies are used in preparing a cumours, for stimulating and inhibiting proliferation of madicament for treating a condition responsive to the polymeptides or T-lymphocyte colls, for modilating the uptake of stimulating differantiation of adipocyte cells, for stimulating colls or T-lymphocyte cells, for stimulating colls or T-lymphocyte cells, for stimulating differantiation of adipocyte cells, for stimulating colls are useful for treating retributes and conditions and conditions which cartilage are useful for treating various mammalian hemoglobin-cartinage defects, osteoarthritis and rheumatoid arthritis. PRO polymeptides are useful for treating various mammalian hemoglobin-cartinage defects, osteoarthritis and rheumatoid arthritis. Common enhanced local immune systeme cells in proteoglycans columner arthritis a human PRO polymucleotide of the invention. The s

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

240 240 120 120 180 180 300 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 360 90 9 GTTGTGTCCTTCAGCAAAACAGTGGATTTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC <u>AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT</u> AAGAAAAAAAATCATGAAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT CTTCACGGGGCTGCTCTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC CTTCACGGGGCTGGCTCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG Gaps ö Length 1679; Indels Query Match
100.0%; Score 1679; DB 1;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; H 121 Н 61 121 181 181 241 61 241 301

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cc alpha from human blood. PRO382, PRO357, PRO1306, PRO1419, PRO214, PRO247, PRO337, PRO526, PRO363, PRO521, PRO1003, PRO647, PRO137, PRO526, PRO363, PRO521, PRO10134, PRO137, PRO1005, PRO1005, PRO10134, PRO1126, PRO1106, PRO10124, PRO11274, PRO1106, PRO11027, PRO1106, PRO110274, PRO1106, PRO110274, PRO1106, PRO110274, PRO1106, PRO11037, PRO1106, PRO10174, PRO10176, PRO10130, PRO10137, PRO10106, PRO10173, PRO10179, PRO10176, PRO10136, PRO10187, PRO1018

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TITAGGIACAATGGAGIITITCTITITCCCAAACGGGAAGAACACAGCACACCCGGCTIGGA 1440
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                                                                                                                                                               Novel human secreted and transmembrane protein PRO337 cDNA.
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29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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The invention describes an isolated PRO (secreted and transmembrane) polygeptide (1). PRO982, PRO1160, PRO1187 or PRO1329 polygeptide are useful for stimulating the proliferation of or gene expression in pericyte cells. PRO357, PRO229, PRO1272 or PRO4405 polypeptide are useful for stimulating the proliferation or differentiation of chondrocyte cells. PRO231, PRO357, PRO1155, PRO1155, PRO1150 or PRO1419 polypeptide are useful for stimulating the release of tumour necrosis factor (TNF)-

hundred and twenty two nucleic acids encoding PRO polypeptides, tul in gene therapy, or for preparing a medicament for treating a lition that is responsive to the PRO polypeptide or anti-PRO antibody,

useful in gene therapy, or fo condition that is responsive

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e.g.

Claim 2; Fig 125; 314pp; English

PJ; Wood WI;

Gerritsen ME, Goddard A, Godowski P. Smith V, Stephan JF, Watanabe CK,

Baker KP, Desnoyers L, Grimaldi JC, Gurney AL,

WPI: 2003-657980/62. P-PSDB; ADC77827

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Human; secreted and transmembrane protein; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte; tumour; adremal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose uptake modulator; FPA uptake modulator; cell proliferation; pericyte cell; inner ear utricular supporting cell; Tlymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; neumatoid arthritis; hamoglobin-associated disorder; thalassaemia; immune system cell infiltration; chromosome mapping; gene mapping; gene therapy; chromosome identification; chromosome marker; gene; se.
                                                                              Novel human secreted and transmembrane protein PRO337 cDNA
                   BP.
                   ADC80008 standard; cDNA; 1679
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                                                          01-JAN-2004
                                      ADC80008;
RESULT 69
ADC80008
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US2003087358-A1.

Homo sapiens.

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08-MAY-2003.

22-APR-2002; 2002US-00127833

01-SEP-1998; 98US-0098750P. 01-SEP-1999; 99WO-US020111. 18-OCT-1999; 99WS-00403297. 18-FEB-2000; 2000WO-US030952. 08-NOV-2000; 2000WO-US030952.

01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072. (GETH) GENENTECH INC.

S; Z; Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang

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WPI; 2003-801143/75. P-PSDB; ADC80009. New PRO nucleic acid, useful for manufacturing a medicament diagnosing or treating tumor.

Claim 2; Fig 375; 637pp; English.

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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation of differentiation of chondrocyte cells and a method for proliferation or differentiation of chondrocyte cells and a method for colon, breast, prostate, rectal, kidney, cervical and liver tumours). The proliferation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of

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glucose or FFA (free fatty acid) by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating proliferation of or gene expression in pericyte cells, for terminating the proliferation of inner ear utricular supporting cells or remindating the proliferation of inner ear utricular supporting cells or treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid carthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polymucleotide of the invention. Note: The sequence date for this patent is also available in electronic format from USPTO at seqdata.uspto.gov/sequence.html.
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Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;
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New isolated nucleic acid encoding a secreted and transmembrane polypeptide, useful for treating a cardiovascular, endothelial, or angiogenic disorder in a mammal, such as cancer or age-related macular degeneration. cardiovascular disorder; endothelial disorder; angiogenic disorder; myocardial infarction; cardiac hypertrophy; trauma; cancer; ges-related macular degeneration; angiogenesis; endothelial cell apoptosis; smooth muscle cell growth; endothelial cell tube formation. Gerritsen ME, Goddard A; KJ, Marsters SA, Pan J, WI, Ye W; Claim 2; SEQ ID NO 55; 493pp; English. PRO polypeptide of the invention. Gerber H, L, Hillan PPM, Wood 1 20-JUN-2001; 2001WO-US019692. 09-JUL-2001; 2001WO-US021735. 20-FEB-2002; 2002US-00081056. 16-AUG-2002; 2002US-00223090 Godowski PJ, Gurney AL, H Watanabe CK, Williams PM, (GETH) GENENTECH INC Ferrara N, WPI; 2003-801242/75. P-PSDB; ADD11305. US2003105013-A1 Homo sapiens. 05-JUN-2003

Stephan JF;

The invention relates to an isolated mucleic acid encoding a secreted and transmembrane polypeptide (PRO). The nucleic acid, a polypeptide encoded by the nucleic acid, or an agonist or antagonist, is used to treat a cardiovascular, endothelial, or angiogenic disorder in a mammal, preferably a human. The human may have suffered a myocardial infarction or has cardiac hypertrophy, trauma, a cancer, or age-related macular companies of degeneration. The cardiac hypertrophy is characterised by the presence of an elevated level of PGF-2 alpha. A PRO polypeptide, given in the specification, or an agonist is used to inhibit or stimulate endothelial companies of the presence of the presence of the presence of the propertrophy. PRO1376 or PRO149 is used to stimulate angiogenesis. PRO1302 or an agonist is used to induce cardiac hypertrophy. PRO1376 or PRO149 is used to stimulate angiogenesis. PRO1979 given in the specification, or an agonist is used to stimulate or inhibit smooth muscle cell growth, or to induce endothelial continue or inhibit smooth muscle cell growth, or to induce endothelial continue which the properties of the intersection of the properties of the properties of the intersection of the properties of the properties

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

ö 240 120 180 240 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 180 9 9 GITGIGICCTICAGCAAAACAGIGGATTTAAATCTCCTTGCACAAGCTTGAGGAGCAACAC GTIGTGTCCCTTCAGCAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGCAACAC AAGAAAAAATCATGAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT CTTCACGGGGCTGCTCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC CTTCACGGGGCTGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGTGC ö 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0; Query Match Best Local Similarity 100. Matches 1679; Conservative -61 121 121 ч 61 181 181

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ADD09477 standard; cDNA; 1679 BP

ADD09477;

(first entry) 01-JAN-2004 Human PRO polynucleotide #188.

Human; gene; 88; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breat; prostate; rectum; kidney; cervix; laver; microvasacular endothelial cell; glucose; FRA; inner ear utricular supporting cell; T-lymphocyte cell; inner ear utricular supporting cell; T-lymphocyte cell; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia; immune system cell infiltration.

Homo sapiens.

JS2003194775-A1.

16-OCT-2003.

28-MAY-2002; 2002US-00156848

03-MAR-2000; 2000US-0187202P. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Gao Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-852595/79. P-PSDB; ADD09478.

New secreted and transmembrane PRO nucleic acids and polypeptides, useful for detecting a tumor, stimulating the release of tumor necrosis factor alpha from blood and stimulating the release of proteoglycans from cartilage.

Claim 2; Fig 375; 637pp; English.

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GGTGCAGACAGCAACCAACCAAAGACCTCTAAGGGTCCACCTCATTGTGCAAGTATCTCC

481

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human bloed, a method for stimulating the presence of a tumour in a memmal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating colon, breast problems and in gene therapy. The polymucleotides may also a setul in the development and screening of knock-out animals which are cuseful in the development and screening of knock-out animals which are useful in the development and screening of the properties or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in himbiting proliferation of human microvascular endothelial cells, for modulating the uptake of simulating differentiation of angles expression in pericyte cells, for stimulating differentiation of since expression in pericyte cells, for stimulating differentiation of since are utricular supporting cells or T-lymphocyte cells, for inducing endothalial cells or adipocyte cells, for modulating the proliferation of since are utricular supporting cells or T-lymphocyte cells, for methating endothalial cell tube formation and for treating cells or treating entries and cartilage are useful for treating various mammalian hasmoglobin-associated disorders such as various thalassaemias and condition. Note: sequence tepresents a human PRO polymucleotide the invention. Note: the sequence response of the invention of the mil 85888888888888888888888888888888888888

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

180 300 300 360 420 420 480 9 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG CACCTTCCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGGGCCACCCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC **AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT** CTTCACGGGGCTGGCTCTGTGTTCTTCCAAGGAGTGCCCGTGCGCAGCGAATGC TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC CTTCACGGGGCTGGCTGTGTCTCTTCCCAAGGAGTGCCCGTGCGCAGGGGAATGC GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC Query Match
Best Local Similarity 100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; 361 Н 61 61 181 181 241 241 301 301 361 421 421 . ପ 요 셤 셤 8 셤 ò g ⋩ g ₽ ઠે ò ઠે

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The invention describes an isolated PRO (secreted and transmembrane)

polypeptide (I). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are
useful for stimulating the proliferation of or gene expression in

periovic cells. PRO357, PRO229, PRO1272 or PRO4405 polypeptide are useful

for stimulating the proliferation or differentiation of chondrocyte

cells. PRO357, PRO355, PRO1155, PRO1156 or PRO449 polypeptide

cells. PRO317, PRO357, PRO1255, PRO1156, PRO1419 polypeptide

alpha from human blood. PRO982, PRO357, PRO725, PRO1419, PRO1419,

PRO1479, PRO1317, PRO526, PRO357, PRO9192, PRO1411, PRO1419, PRO1410,

PRO1478, PRO1181, PRO1126, PRO1186, PRO1192, PRO1274, PRO1274, PRO1412,

PRO1478, PRO1310, PRO1365, PRO1376, PRO809, PRO1274, PRO1274, PRO1339,

PRO1486, PRO1330, PRO1347, PRO1861, PRO1474, PRO1174, PRO1412,

PRO1867, PRO1376, PRO3137, PRO1801, PRO14174, PRO1117, PRO1411, PRO1389,

PRO1867, PRO1376, PRO3187, PRO1096, pRO1474, PRO1117, PRO1411, FRO9187,

PRO1867, PRO1376, PRO3187, PRO1408, PRO14174, PRO1501, PRO1481, PRO5223, PRO5723, PRO5723, PRO5723, PRO5723, PRO5723, PRO5725, PRO7154, or PRO1408, PRO1941, PRO1481, PRO1941, FRO1194, PRO1194, PRO1481, PRO5723, PRO5723, PRO5724, PRO7154, or PRO1481, PRO1488, PRO4408,

PRO5723, PRO5725, PRO7154, or PRO7425, PRO1488, PRO4408,

PRO5723, PRO5725, PRO7154, or PRO7481, PRO1774, PRO5778, PRO4408,

conhibiting the proliferation of normal human dermal fibroblast cells. PRO 10190 polypeptides such as PRO86004, PRO4911, PRO5778, PRO5732, etc.,

are useful for detecting the presence of tumour in a mammal which
 1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTG 1620
                                                                                                                                                                                                                                                                           Human; secreted and transmembrane protein; PRO; gene; se; cytostatic; vulnerary; antiarthritic; pericyte cell proliferation; pericyte cell differentiation; chondrocyte cell proliferation; chondrocyte cell differentiation; unmour necrosis factor alpha release; (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; lissue typing; chromosome mapping; gene mapping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated nucleic acid encoding a secreted and transmembrane polypeptide (PRO), for use in recombinantly producing a PRO polypeptide as a hybridization probe, and in gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephan JF, Watanabe CK, Wood WI;
                                                    GTAGACTGTGCCACCACGGCGTGTGTGTGAAACGTGAAATAAAAAGAGACAAAAAAA
                                                                                                                                                                                                                                               Novel human secreted and transmembrane protein PRO337 cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 2; Fig 125; 308pp; English.
                                                                                                                                                ADD50789 standard; cDNA; 1679 BP
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09-APR-2002; 2002US-00119480.
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, Gurney AL,
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P-PSDB; ADD50790.
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Grimaldi JC,
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involves comparing the level of expression of the above PRO polypeptides in a test sample of cells taken from the mammal, and a control sample of normal cells of the same cell type, where a higher level of expression of the PRO polypeptides in the test sample as compared to the control sample is indicative of the presence of tumour in the mammal. The tumour is luminarized to the control sample tumour, colon tumour, breast tumour, prostate tumour, rectal tumour of liver tumour. (I) is useful as molecular weight markers, for tissue typing, or as therapeutic as melecular expective (II) encoding (I) is useful for chromosome and gene mapping or gene therapy. (II) is useful for generating transgenic animals or knock-out animals which are useful screening useful reagents. PRO357, PRO229, PRO1272 or PRO4405 polypeptide is useful for treating bone and/or cartilage disorders (e.g., arthritis, prot injuries). This sequence encodes a human secreted and transmembrane 88888888888888888888

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PRO polypeptide. Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;	uery Match 100.0%; Score 1679; DB 1; Length 1679; best Local Similarity 100.0%; Pred. No. 6.7e-05; Atches 1679; Conservative 0; Mismatches 0; Indels 0; Gaps	1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAAACC (61 AATCTATCAGGAAAGAAAGAAAAAAAAACGAACCTGACAAAAAAAA	121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGGAAT	181 CTTCACGGGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGCAGATGC	241 CACCTTCCCCAAAGTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG	301 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCACTCTCTA	361 IGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC 	421 GCAGTACAGCATCGAGATCCAGAAGGTGGATGTGTATGAGGAGGCCCTTACACCTGCTC 	481 GGTGCAGACAGACCACCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC	541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGAACAATATTAGCCTCAC 	601 CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC	661 GGTTGGCTTTGTGAGTGAAGGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC	721 AGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCCTGGTACGGACAGTAAA 	

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Novel human secreted and transmembrane protein PRO337 cDNA.

Human; secreted and transmembrane protein; PRO; gene; 88; Tumour necrosis factor alpha release; TNF-alpha release;

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glucose uptake modulator; FFA uptake modulator; cell proliferation stimulator; cell differentiation stimulator; cell differentiation inhibitor; cytokine release stimulator; tumour; lung tumour; colon tumour; breast tumour; rectal tumour; rectal tumour; cervical tumour; ilver tumour hromosome mapping; gene mapping; chromosome identification; chromosome marker.
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Homo sapiens.

US2003203438-A1.

30-OCT-2003.

15-MAY-2002; 2002US-00146786

24-NOV-1997; 97US-0066511P. 16-SEP-1998; 98WG-US019330. 25-AUG-1999; 99US-00380139. 22-FEB-2000; 2000WG-US034114. 01-DEC-2000; 2000WG-US032678. 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Baker XP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W; Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-875645/81. P-PSDB; ADD41191. New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or PRO4978, useful in molecular biology, chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy.

Claim 2; SEQ ID NO 375; 637pp; English.

The invention describes 105 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (1). (1) is useful for stimulating the release of TMF-alpha from human blood, for modulating the uptake of glucose or FPA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating proliferation of T-lymphocyte cells, for stimulating proliferation of adipocyte cells, for stimulating proliferation of endothelial cells, for stimulating cells, for inhibiting the binding of A-peptide to factor VINTA, for inhibiting the binding of the presence of tumour in a mammal. The tumour is lung, colon, breast, the presence of tumour in a mammal. The tumour is lung, colon, breast, cells, for stimulating prodefice of a liver timour. The oligonouclectide probes are useful for isolating genomic and CDNA nucleotide sequences or antisense probes. (1) is also useful as therapeutic agent. PRO is useful in a service or for propagation of PRO purpopende, for generating transgenic animals or correction. A polymorlectide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the correction of PRO purpopende, for generating transgenic animals or correction of corrections or serum, and for generating of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating correcting its expression in specific cells, itssues or serum, and for anovel human secreted and transmembrane PRO polypeptide.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0; Gaps

720 840 840 900 900 960 960 120 180 180 240 240 300 300 360 360 420 420 480 480 540 540 600 600 999 9 720 780 780 9 361 IGCTGGGBATGACAAGTGGTGCCTGGATCCTCGGGTGGTCCTTCTGAGCAACACCCAAAC 541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 601 CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 721 AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCCGTGGTACGGAGAGTAAA 781 GGICACCGIGAACTAICCACCAIACAITICAGAAGCCAAGGGIACAGGIGICCCCGIGGG GGTCACCGTGAACTATCCACCCATACATTTCAGAAGCCAAGGGTACAGGTGCTCCCCGTGGG ACAAAAAGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGGAACTACACTTGCGT CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACAGGT GGCCTCCAACAAGCTGGGCCACACCAATGCCCAGCATCATGCTATTTGGTCCAGGCGCCGT 1021 GGCCTCCAACAAGCTGGGCCACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT CAGCGAGGTGAGCAACGCACGTCGAGGAGGCAGGCTGCGCTCTGGCTGCTGCTGCTCTCT 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGGCGCCACCCTCAG CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCCCCAAAGC AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCCCGTGGTACGGAGAGTAAA CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAAGAGGGGTGAAAAGTGGAAAACAGACCTTT GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCCTTGCACAAGCTTGAGAGCAACAC 61 AATCTATCAGGAAAGAAAGAAAGAAAAAACCGAACCTGACAAAAAAGAAGAAAAAGAAG GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 601 1021 361 721 841 961 196 541 661 781 901 1081 421 g 8 8 8 6 6 6 6 6 6 6 6 6 8 B 8 B 8 B 8 B 8 8 8 à ð В ò ద 8 8 ò 셤

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CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC 1500
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1081 CAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGTCTGGCTGCTGCTTCT 1140
                                                                                                                                                                                                                                                                                                                                                                                                                       Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FPA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; artiliage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; heemoglobin-associated disorder thalassaemia; immune system cell infiltration.
                                                                                      1261 TATACAAATGAAATTAGAAGAAAAAACACCCTCATGGGACAGAAAATTTGAGGAGAGGAAC
                                                                                                                                                                                                                                                                                                                        TCTGCCCAAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAAATTCAATCA
                                       TITAGGIACAATGGAGTITICITITCCCAAACGGGAAGAACACACACACCCCGGCTIGGA
                                                                      GCCGCCACCACCACCAACACACAGCAATGGCAACACGCGACAGCAACCAATCAGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cDNA encoding human PRO polypeptide #188.
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01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymuclectides encoding them. The invention also relates to an antibody which specifically binds to a FRO polypeptide, a method for stimulating the invention also relates to an antibody which specifically binds to a FRO polypeptide, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, corporate, related, kidney, cervical and invention and presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymuclectides may also hypridisation probes, in chromosome and gene mapping, in generating antisense KNA and DNA and in gene therapy. The polymuclectides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful useful in the development and screening of therapeutically useful useful in the development and screening of therapeutically useful useful in the development and screening of therapeutically useful useful in the development and screening of therapeutically useful useful in the development and screening of therapeutically useful useful antibodies, such as tumours, for stimulating and inhibiting proliferation of finner endition responsive to the polypeptides or antibodies are useful muscle cells, for stimulating differentiation of adipocyte cells, for stimulating adipocyte cells, for stimulating adipocyte cells, for stimulating and relating various bene and/or cartilage disorders such as sports injunated and continues and continues and cartilage defects, osteoarthities and rheumatoid architage are useful for treating sports-related joint problems, associated disorders such as various thalassaemias and conditions which castlings are also useful for treating various and conditions which are supported to the property of sequence encodes a human PRO polypepti
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                                                                                                                                                               New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for detection of tumors, modulating the uptake of glucose or free fatty acids and stimulating the release of proteoglycans from cartilage.
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             Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G.
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
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Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;
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                                                                                                                                                                                                                                                                               Claim 2; Fig 375; 637pp; English
                                                                                                       2003-852593/79
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241 CACCTICCCCAAAGCTATGAACATGACGTCCGGCAGGGGGAGGGGCGCCACCTCAG

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GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCCAAGCGTGGGCGCTGCGGGCACTTTG 1620
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated nucleic acid encoding a secreted and transmembrane polypeptide (PRO), for use in recombinantly producing a PRO polypeptide as a hybridization probe, and in gene therapy.
                                                                            CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC
                                                                                                                                  TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA
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                           TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACAGCACCCGGCTTGGA
                                                             CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCCAAGGGCCTCAGCCTC
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                                                                                                                                                                                                                    Human; secreted and transmembrane protein; PRO; gene; ss; cytos vulnerary; antiarthritic; pericyte cell proliferation; pericyte cell differentiation; chondrocyte cell proliferation; chondrocyte cell differentiation; tumour necrosis factor alpha (TNF)-alpha release; dermal fibroblast cell differentiation inhibitor; tumour; lung colon tumour; breast tumour; prostate tumour; rectal tumour; lung liver tumour; tissue typing; chromosome mapping; gene mapping;
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Smith V, Stephan JF, Watanabe CK,
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29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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P-PSDB; ADD51036.
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Grimaldi JC,
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                                         GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA
                                                                                                                              GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC
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cells. PRO231, PRO357, PRO725, PRO1155, PRO1306 or PRO1419 polypeptide are useful for stimulating the release of tumour necrosis factor (TWF)-capha from human blood. PRO362, PRO351, PRO1305, PRO1306, PRO1419, PRO214, PRO347, PRO1340, PRO1309, PRO1134, PRO1361, PRO1105, PRO1105, PRO10134, PRO1340, PRO1309, PRO1301, PRO1
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Best Local Similarity 100.
Matches 1679; Conservative
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cDNA encoding human PRO polypeptide #188.
                                  ADD53069 standard; cDNA; 1679 BP.
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99WO-US00106.
99WO-US005028.
99WO-US005190.
2000WO-US006319.
99WO-US008615.
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99WO-US012252.
99WO-US020111.
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99WO-US023089.
99WO-US028214.
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99WO-US030911
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99WO-US030720
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17-SEP-1998;
07-OCT-1998;
29-OCT-1998;
29-OCT-1998;
20-NOV-1998;
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10-MAR-1999;
20-APR-1999;
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05-JAN-1999;
08-MAR-1999;
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New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or PRO4978, useful in chromosome and gene mapping, in generating antisense RNA and DNA, and in the treatment of cancer.
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08-NOV-2000, 2000WC-US030952.
01-DEC-2000, 2000WC-US030873.
01-DEC-2000, 2000WC-US030873.
20-DEC-2000, 2000WC-US034956.
28-FEB-2001, 2001WC-US034956.
28-FEB-2001, 2001WC-US006666.
01-MAR-2001, 2001WC-US006666.
14-MAR-2001, 2001WC-US006666.
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11-FEB-2000; 2000MO-US00376.

18-FEB-2000; 2000MO-US004341.

22-FEB-2000; 2000MO-US004414.

24-FEB-2000; 2000MO-US004914.

24-FEB-2000; 2000MO-US004914.

24-FEB-2000; 2000MO-US004914.

24-FEB-2000; 2000MO-US005601.

20-MAR-2000; 2000MO-US00561.

15-MAR-2000; 2000MO-US005841.

15-MAR-2000; 2000MO-US005841.

17-MAR-2000; 2000MO-US00581.

17-MAR-2000; 2000MO-US00581.

17-MAR-2000; 2000MO-US00581.

17-MAR-2000; 2000MO-US00581.

17-MAR-2000; 2000MO-US01404.

20-MAY-2000; 2000MO-US014941.

21-MAY-2000; 2000MO-US014941.

22-MAY-2000; 2000MO-US014941.
   30-DEC-1999; 99WO-US031243.
30-DEC-1999; 99WO-US031274.
05-JAN-2000; 2000WO-US000219.
06-JAN-2000; 2000WO-US000277.
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09-AUG-2001; 2001US-00927796.
16-AUG-2001; 2001US-00921072.
19-DEC-2001; 2001US-00028072.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-852599/79.
P-PSDB; ADD53070.
     Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; trumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeleral muscle cell; daipocyte cell; pericyte cell; inner ear utricular supporting cell; pericyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; endothelial cell tube formation; bone disorder; cartilage disorder; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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3 Gao S;

Claim 2; Fig 375; 638pp; English

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the polypeptide, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for proliferation or differentiation of chondrocyte cells and a method for proliferation or differentiation of chondrocyte cells and a method for constant and a method for stimulating the proliferation probes, in chromosome and gene mapping, in generating collon, brass, prostate, rectal, kidney, cervical and liver tumours). The colymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating collons, present and second in gene therapy. The polymucleotides may also consisted in preparing PRO polypeptides by recombinant techniques and in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development of screening of knock-out animals which are useful in the development of screening of the modition of collission and screening of the modition of the modition of the modition of screening and inhibiting proliferation of human microvascular endothelial cells, for modilating the uptake of stimulating differantiation of since expression in pericyte cells, for stimulating colliferation of since are utricular such as sports injuries and arthritis. PRO polypeptides which stimulate the relates of proceedyrans (colls, for inducing endothelial cell tube formation and for treating college are useful for treating sports related joint problems. The proliferation of inner articular cartilage defects, osteoarthitis and rheumatoid arthritis. PRO polypeptides which stimulates are second and sorders such as various human encodes a human PRO polypeptide or a suggement of the USPTO website at sequence encodes a human

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

240 240 300 360 420 480 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT 180 180 300 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 360 recredesaricacaacrecresarccrescrescresrecricitadeacaccaaac 420 480 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCCTCAG GIGCACTATIGACAACCGGGICACCCGGGIGGCCIGGCIAAACCGCAGCACCAICCICIA GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC CTTCACGGGGCTGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGAGATGC Gaps ö 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; tive 0; Mismatches 0; Indels 0; Conservative Best Local Similarity Matches 1679; Conserv 19 121 121 181 241 241 301 301 361 Query Match 181 361 121 121 셤 8 8 8 8 4 8 4 8 4 8 8 8 8

1440 1440 1080 1140 1380 1500 TCTGCCCACAGAGTGCCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560 GCCGCCACCACCACCAACACACAGCAATGGCAACACGGACAGCAACCAATCAGATA 1260 960 720 780 780 840 840 900 900 960 009 600 9 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGGTGAAAAGTGGAAAACAGACCTTT 1141 GETCTIGCACCIGCITCICAAAITTIGAIGIGAGIGCCACITCCCCACCCGGGAAAGGCI AAAGAATACTTTGGGGGAAAAGAGTTTTAAAAAAAGAAATTGAAAATTGCCTTGCAGATA CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC edridecirirereadreaadaceaaracritedaaarreagedeareacceegagedere AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCGCGCGTGGTACGGAGAGTAAA GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 841 ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT CCTCTCAAAACTCCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACGCGT GGCCTCCAACAAGCTGGGCCACAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT 1021 GGCCTCCAAGAAGCTGGGCCACACCATGCCAGCATCATGCTATTTGGTCCAGGCGCGT CAGCGAGGTGAGCAACGCACGTCGAGGAGGGCAGGCTGCGGTGGCTGCTGCTCTTCT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCGGGAAAGGCT GCCGCCACCACCACCACACACACACATGGCAACACCGACGAACCAATCAGATA <u>AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA</u> TITAGGTACAATGGAGTITICTITICCCAAACGGGAAGAACACAGCACACCCGGCTTGGA TITAGGIACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACAGGACACCCCGGCTTGGA cccacrecaaecrecarcerecaaccrerrregreecagreresecaaesecreacere TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA GOTGCAGACAGACCACCACCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC **CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC** CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC **AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCGCGCCGTGGTACGGAGAGTAAA** CAAGGATGACAAAGACTGATTGAAGGAAAGAAAGGGGGTGAAAGTGGAAAACAGACCTTT CAGCGAGGTGAGCAACGCCACGTCGAGGAGGCAGGCTGCGTCTGGCTGCTGCTTCTTCT 661 106 1081 1261 1441 541 721 841 1021 1081 1201 1261 1381 1501 1501 481 601 601 661 781 781 961 196 1141 1201 1321 1321 1381 1441 721 901 481 g q ઠે ф 셤 ठे 셤 ઠે 셤 ò 셤 ò 임 à 셤 ò 9 ર્જ 셤 ò 용 ઠે 음 δ 셤 ö ద ò 셤 ò ઠે ठे ઠે

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The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (1). (1) is useful for stimulating the transmembrane) polypeptides (1). (1) is useful for stimulating the acids are dipocyte calls, for stimulating the proliferation or differentiation of chordrocyte calls, for stimulating the proliferation or differentiation of chordrocyte calls, for stimulating the proliferation of proceoglycans from cartiage, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of for a cartiacular supporting cells, for stimulating the proliferation of T-1ymphocyte cells, for stimulating the proliferation of T-1ymphocyte cells, for stimulating conception of adoptory to the release of a cytokine from PBMC cells, for inhibiting the binding of cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonucleotide probes are useful for isolating genomic and cDMA uncleotide sequences or antisense probes. (1) is also useful as therapeutic agent. PRO is useful
GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCGCTGCGGGCCTTTG 1620
                                                                                                           1679
                                                                                                                                                                                                                                                                                                                                                  Human; secreted and transmembrane protein; PRO; gene; ss;
Tumour necrosis factor alpha release; TNP-alpha release;
glucose uptake modulator;
cell proliferation stimulator; pPA uptake modulator;
cell differentiation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
lump tumour; colon tumour; breast tumour; prostete tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
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                                                                                             Gao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 PRO4978, useful in molecular biology, chromosome and gene mapping, generating antisense RNA and DNA, and in gene therapy.
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                    Novel human secreted and transmembrane protein PR0337 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 2; SEQ ID NO 375; 659pp; English.
                                                                                                                                                                                                       BP.
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02-JUN-1999; 99WO-US012252.
01-DEC-2000; 2000WG-US032678.
01-DEC-2001; 2001US-00028072.
                                                                                                                                                                                                       ADD53621 standard; cDNA; 1679
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                                                                                                                                                                                                                                                                              (first entry)
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Gerritsen ME, Goddard,
Smith V, Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-875644/81.
P-PSDB; ADD53622.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
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                                   1561
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 1561
                                                                                                                                                                                                                                          ADD53621;
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in assays to identify other proteins or molecules involved in binding interaction. A polynucleotide (II) encoding (I) is useful in chromosome and game mapping, in generation of antisense RNA and DNA, in the preparation of FNC polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and carcening of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes. An anti-(I)-antibody is useful in diagnostic assays for FNC, e.g. detecting its expression in specific cells, tissues or serum, and for affinity purification of PNC from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This sequence encodes a novel human secreted and transmembrane PNC polypeptide. ö 300 540 540 099 720 720 120 180 180 240 240 300 360 360 420 420 480 480 600 600 099 780 60 9 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT CACCTTCCCCAAAGCTATGGACAACGTGACGGGCAGAGGGGGCGCCACCTCAG GTGCACTATTGACAAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 361 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGCTCCTTCTGAGCAACACCCCAAAC GCAGTACAGCATCGAGATCCCAGAACGTGGATGTGTATATGACGAGGGCCCCTTACACCTGCTC 481 GGTGCAGACAGACCACCCAAAGACCTCTAGGGTCCACTCATTGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC **AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA** GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 1 GITGIGICCTICAGCAAACAGIGGATTIAAAICTCCTIGCACAAGCTIGAGAGCAACAC 61 AATCTATCAGGAAAGAAAGAAAAAAAACCGAACCTGACAAAAAAAGAAAAAAGAAG 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT CTTCACGGGGCTGCTGTCTCTCTTCCAAGGAGTGCCCGGTGCGCAGCGGAGATGC GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCTTA TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GGTGCAGACAGACCACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC Gaps 0; Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; 301 601 661 721 181 241 301 421 421 541 541 601 661 721 781 361 181 8888888888888888 8 8 ò g g ઠે 8 S 8 8 8 8 8 8 8 6 8 के क्षे के 8 8 g ò 8 8 ⋧

1260 1440 1140 1200 AAAGAATACTTTGGGGGGAAAAAGATTTAAAAAAAAAATTGAAAATTGCCTTGCAGATA 1380 AAAGAATACTTTGGGGGGAAAAAGAGTTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA 1380 TTTAGGTACAATGGAGTTTTTCTTTTCCCAAACGGGAAGAACACACCACCACCCCGGCTTGGA 1440 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560 1080 1080 1140 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC 1500 TCTGCCCACAGAGTGCCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560 1020 1020 840 900 900 960 960 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTG CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT CCICICAAAACICAICIICIICAIGICICIGAACAIGACIAIGGGAACIACACIGCGI dercricacitectrenantricandreserecaciteccaccededaaadact GOCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT 1021 GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGGGCGT CAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGCTGTGCTGCTGCTTCTTCT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CAAGGATGACAAAGACTGATTGAAGGAAAGAAAGAAGGGGTGAAAGTGGAAAACAGACCTTT GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 1561 1501 1261 1381 1441 1501 1561 196 1081 1081 1141 1141 1201 1201 1261 1321 1321 1381 1441 1621 901 1021 901 196 ద ठे 원 ò qq ઠે д ò d 8686 ò ద ਨੇ 엄 8 8 8 6 Š g g & à ò

ADD37097 standard; cDNA; 1679

BP

ADD37097;

(first entry) 15-JAN-2004 Human secreted/transmembrane PRO polypeptide cDNA #28

ss; gene; human; secreted protein; transmembrane protein; carditovascular disorder; endochellal disorder; anglogenic disorder; myocardial infarction; cardiac hypertrophy; trauma; cancer; age-related macular degeneration; anglogenesis;

growth; cell muscle smooth apoptosis; smoo tube formation. endothelial cell endothelial cell

JS2003105012-A1 Homo sapiens

05-JUN-2003

16-AUG-2002; 2002US-00223088

15-SEP-2000; 2000US-0232887P. 20-UUN-2001; 2001WO-US019692. 09-UUL-2001; 2001WO-US021735. 20-PEB-2002; 2002US-00081056.

(GETH) GENENTECH INC

Stephan JF; Gerber H, Gerritsen ME, Goddard A; J, Hillan KJ, Marsters SA, Pan J, PM, Wood WI, Ye W; Baker KP, Ferrara N, Gerb Godowski PJ, Gurney AL, H Watanabe CK, Williams PM,

WPI; 2003-829354/77. P-PSDB; ADD37098. New isolated nucleic acids encoding a secreted and transmembrane polypeptide for treating a cardiovascular, endothelial, or angiogenic disorder in a mammal, such as cancer or age-related macular degeneration.

Claim 2; SEQ ID NO 55; 492pp; English.

The invention relates to an isolated nucleic acid encoding a secreted and transmembrane polypeptide (PRO). The nucleic acid, a polypeptide encoded by the nucleic acid, or an agonist or antagonist, is used to treat a cardiovascular, endothelial, or anagonist, is used to treat a cardiovascular, endothelial, or anagoiogenic disorder in a mammal, preferably a human. The human may have suffered a myocardial infarction or has cardiac hypertrophy, trauma, a cancer, or age-related macular of degeneration. The cardiac hypertrophy is characterised by the presence of an elevated level of PGF-2 alpha. A PRO polypeptide, given in the specification, or an agonist is used to inhibit or stimulate endothelial complexity. PRO1376 or PRO1499 is used to inhibit or stimulate endothelial probably. PRO1376 or PRO1499 is used to stimulate angiogenesis. PRO4302 or an agonist is used to induce cardiac propertied, given in the specification, or an agonist is used to call growth in the specification, or an agonist is used to stimulate or inhibit smooth muscle cell growth, or to induce endothelial cell tube formation. The present sequence represents a cDNA encoding a PRO polypeptide of the invention.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

ö 9 GITGIGICCTICAGCAAAACAGTGGATTTAAATCTCCCTTGCACAAGCTTGAGAGCAACAC .; 0 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; tive 0; Mismatches 0; Indels 0; Best Local Similarity .v.. Matches 1679; Conservative Local Similarity -4 Query Match ઠ

240 120 120 180 9 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 181 CTICACGGGCTGCTGTCTCTCTTCCCAAGGAGTGCCCGTGCGCAGGAGATGC 121 셤 셤 ઠે ò ઠે

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241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG

1200 1080 1080 1200 1020 1020 | TATACAAATGAAATTAGAAGAAACACAGCCTCATGGGACAGAAATTTGAGGGGGGGAAC 1320 1380 1380 GCCGCCACCACCACCACCACACACACCAATGGCAACACCCGACAGCAACCAATCAGATA 1260 840 840 900 960 960 900 99 9 720 720 780 780 900 360 420 420 480 480 540 540 900 360 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC GGCCTCCAACAAGCTGGGCCACAACGCCAGCATCATGCTATTTGGTCCAGGCGCGT AAAGAATACTTTGGGGGGAAAAGACTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGGGGGTCCTTCTGAGCAACACCCCAAAC GCAGTACAGCATCGAGAACCTGGAATGTGTATGACGAGGCCCTTACACCTGCTC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCCGGGAGCAGCCATC AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGTAAA GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCCGTGGG GGTCACCGGGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGCCCCGTGGG CAAGGATGACAAAAGACTGATTGAAGGAAAGGAAAGGGGGGGAGGAAAGGGAAAACCTTT CCTCTCAAAACTCATCTTCATGTCTCTGAACATGACTATGGGAACTACACTTGCGT GGCCTCCAACAAGCTGGGCCACAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT съесеместелествествествения GIGCACTATIGACAACCGGGTCACCGGGTGGCCTGGCTAAACCGCAGCACCACCTCTA CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 1021 1021 1081 1081 1141 1141 1261 781 196 1201 1201 1261 1321 1321 661 721 721 781 841 841 901 901 196 541 541 601 301 361 361 121 121 481 481 601 199

8 & B

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8 8

Human; gene; 88; PRO; secreted polypeptide; transmembrane polypeptide; tumnour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumnour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; periorte cell; periorte cell; inner ear utricular supporting cell; prostoyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; esporte injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration. The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis 3 Gao New secreted and transmembrane PRO nucleic acids and polypeptides, for detecting the presence of a tumor, stimulating the release of t necrosis factor alpha from human blood and treating, e.g. organ fai . S. F. Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang cDNA encoding human PRO polypeptide #188. 2; Fig 375; 637pp; English. BP 05-JUN-2000; 2000US-0209832P. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072. ADD51777 standard; cDNA; 1679 15-JAN-2004 (first entry) (GETH) GENENTECH INC WPI; 2003-852597/79. P-PSDB; ADD51778. US2003194779-A1 1621 ADD51777; Claim RESULT 7: ADD51777

1560

GTCCATAGAGACGAGAACAGAATGAGACCTTCCGGCCCCAAGCGTGGCGTGCGCGCTGCGGGCACTTTG

GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCCAAGCGTGGCGCTGCGGGCACTTTG

TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA

CCCACTGCAAGCTGCAACCTCTTTGGTGCCAGTGTGGGCCAAGGGCTTCAGCCTC

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1501 1501 1501 1561 1561

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1441

cc factor-alpha (TRF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, Kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as antisense RNA and DNA and in gene therapy. The polymucleotides may also antisense RNA and DNA and in gene therapy. The polymucleotides may also generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful creagents. The RNO polympetides or antibodies are used in preparing a condition responsive to the polymestal or medicament for treating a condition responsive to the polymestal or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating proliferation of or gene expression in perforte cells, for stimulating conditions of or gene expression in perforte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cells as sports endision and for treating cartilage and modor cartilage disorders such as sports injuries and articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides which stimulate cells infiltration. Note: The associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. Note: The high of the invention. Note: The high of the invention and conditions which have not the man and an endal conditions and the interference fate and the man endal conditions are not conditions and conditions which the articular cartilage are also useful for associate the USPTO website at segdata.uspto.gov. 888888888888888888888888888888888888

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

240 AATCTATCAGGAAAGAAAGAAAGAAAAAACCGAAACCTGACAAAAAAAGAAGAAAAAGAAG AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 180 CTTCACGGGGCTGGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAATGC 240 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG 300 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 360 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 360 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAAC 420 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 480 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 480 GGTGCAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 540 GGTGCAGACAGACCACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 540 CAAAATTGTAGAGATTTCTTCAGATATCTCCCATTAATGAAGGGAACAATATTAGCCTCAC 600 1 GITGIGICCITCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGAGCAACAC 60 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGAGCAAACCAC 60 cricacececrecrecrerencircricaaeeaerecereceaeeaearec 0; Gaps 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0; Matches 1679; Conservative Local Similarity 241 61 121 181 181 241 301 301 361 421 421 481 481 541 Query Match 361 8 8 ద જે ద 8 8 ठे 셤 8 8 8 6 ઠે g ઠે

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රි සි	661	rgcctitgtgagtgaagacgaatactiggaaatitcagggcatcaccgggagtg 7
ŀδ	721	GGGGACTACGAGTGCCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA 7
යු	721	
ठे द	781	TCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 8
g &	/81	11CAGAAGCCAAGGGAACAGGIGICCCCGIGGG 8
· 4	841	ACAAAAGGGAACACTGCAGTGTAAAGCCTCAGCAGCTCCAGCAGAATTCCAGTGGTA 900
λο	901	CAAGGATGACAAAAGACTGATTGAAGGAAAAGAGGGGTGAAAGTGGAAAACAGACCTTT 960
qq	901	CTTT 9
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Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; artilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; hemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                             ADD02576 standard; cDNA; 1679 BP
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01-SEP-1999; 99WO-0520111.
18-CTT-1999; 99US-0042297.
18-FEB-2000; 2000WO-US004342.
24-AUG-2000; 2000WO-US023328.
01-DEC-2000; 2000WO-US023328.
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for proliferation or differentiation of chondrocyte cells and a method for offerenting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing a mediament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothelial cells, for modulating the uptake of New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 PRO4978, useful in molecular biology, chromosome and gene mapping, generating antisense RNA and DNA, and in gene therapy. Claim 2; Fig 375; 637pp; English

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stimulating differentiation of adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating to proliferation of or gene expression in pericyte cells, for stimulating to the proliferation of or gene expression in pericyte cells, for stimulating c the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating cells, for inducing endothelial cell tube formation and for treating cartilage and/or cartilage disorders such as sports injuries and cartilage are useful for treating sports-related joint problems, contribute cartilage defects, osteoarthritis and rheumandidan haemoglobin-carticular cartilage defects, osteoarthritis and rheumandidan haemoglobin-complyeptides are also useful for treating various mammalian haemoglobin-cassociated disorders such as various thalassaemias and conditions which complements a human PRO polymoclectide of the invention. This sequence data for this patent is also available in electronic format from USPTO at seqdata.uspto.gov/sequence.html.
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100.0%; Score 1679; DB 1;
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Matches 1679; Conservative 0; Mismatches 0;
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Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide; ADD50516 standard; cDNA; 1679 Human PRO polynucleotide #63. (first 15-JAN-2004 ADD50516;

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The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polymucleotides encoding them.

The PRO polypeptides and polymucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for diagnostics, biosensors or bioreactors. They are particularly useful for detecting tumour, rectal tumour or liver tumour, breast tumour, co profestate tumour, rectal tumour or liver tumour) in a mammal, for stimulating the release of tumour necrosis factor (TNF) alpha from human constitution the release of tumour necrosis factor (TNF) alpha from human conference of the stimulating the proliferation of conference of the stimulating the proliferation of or gene confissation probes, in chromosome and gene mapping, in generating canisation probes, in chromosome and gene mapping, in generating transgenic animals or knock-out animals which the technology, in generating transgenic animals or knock-out animals which can beed in the development and screening of therapeutically useful can be used in the development and screening of therapeutically useful cantibodies, are useful for preparing a medicament for treating a condition which is responsive to the PRO polypeptides or anti-PRO antibodies, are useful for preparing a medicament for treating and indisorders (e.g. arthritis, sports injuries), involving inducing the re-differentiation of chondrocytes. The PRO polypeptides are useful as confident markers for protein electrophoresis, and in tissue typing. This sequence represents a human PRO polyputode of the invention. 180 Novel isolated PRO polypeptide useful for tissue typing, as molecular weight markers in protein electrophoresis, for treating arthritis, tumor. Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI; 1 errerectricaecaaaacaeresarriraarcrectrecacaaecrreaseacae 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 1 GITGIGICCTICAGCAAAACAGIGGAITITAAAICTCCTIGCACAAGCIIGAGAGCAACAC Gaps tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic. ; 0 Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Claim 2; Fig 125; 308pp; English. 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480. 29-AUG-2002; 2002US-00232229. Desnoyers L, (GETH) GENENTECH INC. 2003-765528/72. WPI; 2003-765528/ P-PSDB; ADD50517. US2003096971-A1. Baker KP, De Grimaldi JC, Homo sapiens. 22-MAY-2003 121 용 ઠે a ઠે g ઠ

	Oy 1321 AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA 1380 	QY 1381 TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACAGCACCAGCCTTGGA 1440 Db 1381 TTTAGGTACAATGGAGTTTTTTCCCAAACGGGAAGAACACAGCACACCCGGCTTGGA 1440	OY 1441 CCCACTGCAAGCTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC 1500 Db 1441 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC 1500	1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCGTTCCCAAATTCAATCA 1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCGTTCCCAAATTCAATCA	1561 GTCCATAGAGACGAATGAGACTTCCGGCCCAGCGTGGCGCTGCGGCCACTTTG	Oy 1621 GTAGACTGTGCCACCACGGGGTTGTGAAACGTGAAATAAAAGAGGAAAAAAAA	RESULT 82 ADD02010 ID ADD02010 standard; cDNA; 1679 BP.	AC ADD02010, XX XX DT 15-JAN-2004 (first entry)		KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; x cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; KW liver; microvascular endothelial cell; glucose; FFA; kW skeletal muscle cell; adipocyte cell; pericyte cell;			PN US2003203430-A1. XX PD 30-OCT-2003. XX	23-APR-2002; 11-AUG-1998;	PR 30-MAR-2000; 2000WS-00380137. PR 30-MAR-2000; 2000WO-US008439. PR 01-DEC-2000; 2000W-US032678. PR 19-DEC-2001; 2001US-00028072.	(GETH) GENENTECH INC. Baker KP, Beresini M, Deforge L,	Gerritsen ME, Goddard A, Godowski FJ, Gurney AL Smith V, Stewart TA, Tumas D, Watanabe CK, Woo	DR P-PSDB; ADD02011.
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New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 PRO4978, useful in molecular biology, chromosome and gene mapping, generating antisense RNA and DNA, and in gene therapy. New isolated nu PRO4978, useful

Fig 375; 637pp; English

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the invention also relates to an antibody which specifically binds to a PRO polypeptide, amethod for stimulating the prosliferation or differentiation of chondrocyte cells and a method for proliferation or differentiation of chondrocyte cells and a method for proliferation or differentiation of chondrocyte cells and a method for collon, breast, prostate, rectal, kidatey, cervical and liver tumours). The prolymucleotides are useful in molecular biology, including uses a hybridisation probes, in chromosome and gene mapping, in generating a chypridisation probes, in chromosome and gene mapping, in generating and in gene therapy. The polymucleotides may also be useful in the development and screening of therapeutically useful cagents. The PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are reagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of animal encourage of the polypeptides are used in preparing collieration of sinner ear utricular supporting cells, for stimulating various bone and/or cartilage disorders such as sports injunities and various bone and/or cartilage disorders such as sports injunities and carting are are also useful for treating sports-related joint problems, articular cartilage are useful for treating sports-related joint problems. This may benefit from enhanced local immune system cells infiltration. Note: Thom Hopper are expressive to the sequence represents a human PRO polypeptide of the invention. Note: The mispon of the properior of the USPTO at segdata.uspto.gov/sequence.html. from

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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240 240 300 420 120 180 180 420 cacerrececaaagerarggacaacgreacegreegecaegegagagaegecececaege 300 9 9 CTTCACGGGGCTGGCTGTCTCTTCCTTCCAAGGAGTGCCCGTGCGCGGAGATGC CACCTTCCCCAAAGCTATGGACAACGTGAGGGCAGGGGAGAGCGCCACCCTCAG TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC GTIGIGITICAGCAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGGCAACAC CTTCACGGGGCTGCTCTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC TGCTGGGAATGACAAGTGGCTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCAAAAC GTTGTGTCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC Gaps ö 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0; Query Match
Best Local Similarity 100.
Matches 1679; Conservative Н 61 61 121 241 301 Н 181 241 181 301 121

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                                    TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; secreted and transmembrane protein; PRO; gene; 88;
Tumour necrosis factor alpha release; TNF-alpha release;
glucose uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator;
lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
cervical tumour; ilver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
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                                                                                                                                                                                                                                                                        GTAGACTGTGCCACCACGCGTGTGTGAAACGTGAAATAAAAAGAGCAAAAAAA 1679
                                                                                                                                                                                                                                                                                                         GTAGACTGTGCCACCACGCGTGTGTTGTGAAACGTGAAATAAAAAGAGCAAAAAAA 1679
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel human secreted and transmembrane protein PRO337 cDNA.
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01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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Gerritsen ME, Goddard
Smith V, Stewart TA,
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P-PSDB; ADD54193.
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are useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. A polynucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and screening of therapeutically useful reagents, in gene therapy, for chromosome marker, and for generating probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, issues or serum, and for affinity purification of PRO from recombinant cell culture or natural sources. (I) and (II) are useful for tissue typing. This sequence encodes a novel human secreted and transmembrane PRO polypeptide. 540 900 99 999 120 120 180 180 240 240 300 300 360 420 420 480 480 9 720 9 9 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 121 AAGAAAAAAATCATGAAAAACCATCCAGCCAAAAATGCACTCAATCTTGGGCAAT 181 CTTCACGGGGCTGGCTGCTCTGTGTCTTCCAAGGAGTGCCCGTGCCCAGGGAGATGC 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCTCAG GGTGCAGACAGACAACCAAAGACCTCTAGGGTCCACCTCATGTGCAAGTATCTCC 481 GGTGCAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGAGGCTTACGGTTACTTGGAGACACATCTCTCCCAAAGC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCCCCAAAGC GCTTGCTTTGTGAGGAGAGAGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC AGGGGACTACGAGTGCGTCCAATGACGTGGCCGCCCCGTGGTACGGAGAGTAAA 1 GITGIGICCTICAGCAAAACAGIGGAITIAAAICICCTIGCACAAGCIIGAGAGCAACAC AAGAAAAAAATCTCATGAAACCATCCAGCCAAAAATGGACAATTCTATCTTTGGGCAAT 181 CTTCACGGGGCTGGCTGCTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCCACCCTCAG 301 Grecacrarreacaacceeercacceeereecreecraaaccecaccaccarcra 361 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC 361 IGCIGGGAAIGACAAGIGGIGGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACACCCAAAC CAAAATTGTAGAGATTTCTTCAGATATCTCCCATTAATGAAGGGAACAATATTAGCCTCAC <u> GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC</u> 301 GIGCACIATIGACAACCGGGICACCCGGGIGGCCIGGCIAAACCGCAGCACCAICCICIA 421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTGTATGACGAGGGCCCTTACACCTGCTC . 0 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Query Match Best Local Similarity 100.0 Matches 1679; Conservative 121 481 541 541 601 661 721 601 661 721 8 8 8 8 8 g à В g ò 셤 ò Db à g 50 50 à g 8 8 8 à ઠે 요 ઠે

tumour necrosis factor-alpha; TNP-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic.

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Goddard A, Godowski PJ; ohan JF, Watanabe CK, Wood WI;

Gerritsen ME, Goddard Smith V, Stephan JF,

Baker KP, Desnoyers L, Grimaldi JC, Gurney AL, (GETH) GENENTECH INC.

WPI; 2003-765527/72

P-PSDB; ADD50271

Novel isolated PRO arthritis, tumor.

26-JUL-2000; 2000US-0220893P. 01-JUN-2001; 2010WO-US017800. 29-JUN-2001; 2001WO-US01066. 09-APR-2002; 2002US-00119480.

29-AUG-2002; 2002US-0023227

JS2003096970-A1 Homo sapiens

22-MAY-2003.

solated PRO polypeptides useful as molecular weight markers in electrophoresis, and useful for tissue typing, for treating

Claim 2; Fig 125; 308pp; English.

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The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polypuclectides encoding them.
The PRO polypeptides and polymuclectides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for detecting tumours (e.g. lung tumour, colon tumour, breast tumour, comparing the release of tumour or liver tumour) in a mammal, for stimulating the proliferation of defecting the release of tumour necrosis factor (TMF) alpha from human blood, for stimulating the proliferation of or gene conditions probes, in chromosome and gene mapping, in generating command the development and screening of therapeutically useful redunding the proliferation of or gene antisense RNA and DNA, in preparing PRO polypeptides by recombinant technology, in generating transgenic animals which reagents, in gene therapy and screening of therapeutically useful reagents, in gene therapy, in chromosome identification, as chromosome markers and in generating probes. The PRO polypeptides, or anti-PRO antibodies, such as perioyte associated tumours and bone and/or cartilage condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as perioyte associated tumours and bone and/or cartilage disorders (e.g. arthritis, sports injuries), involving inducing the redifferentiation of chondrocytes. The PRO polypeptides are useful as modecular markers for protein electrophoresis, and in tissue typing. This equence represents a human PRO polypuccide of the invention.
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Best Local Similarity 100.
Matches 1679; Conservative
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Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide; tumour; cancer; lung; colon; breast; prostate; rectum; liver;

Human PRO polynucleotide #63.

(first entry)

15-JAN-2004

ADD50270
ID ADD5
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ADD50270 standard; cDNA; 1679 BP

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vulnerary; antiarthritic; pericyte cell proliferation; pericyte cell differentiation; chodrocyte cell proliferation; chodrocyte cell proliferation; chondrocyte cell differentiation; tumour necrosis factor alpha release; (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell proliferation; close fibroblast cell differentiation infibitor; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; lissue typing; chromosome mapping; gene mapping;
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Smith V, Stephan JF, Watanabe CK,
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29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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The invention describes an isolated PRO (secreted and transmembrane)

CC polypeptide (1): PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are useful to useful for trimulating the pro116ration of or gene expression in periove cells. PRO357, PRO229, PRO1152 or PRO4405 polypeptide are useful cor trimulating the pro116ration of defondrocyte cells. PRO357, PRO229, PRO1152, PRO1306 or PRO4419 polypeptide are useful cells. PRO351, PRO952, PRO1155, PRO1306 or PRO4419 polypeptide are useful cells. PRO351, PRO952, PRO9525, PRO91306, PRO91306, PRO1307, PRO9131, PRO9

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

240 CTTCACGGGGCTGCTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGAGTGC 240 CACCTTCCCCAAAGCTATGGACAACGTGACGTCCGGCAGGGGGAGAGCGCCCACCCTCAG 300 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 480 9 crrcaceaeecreecrecrcrerererrerecraseaerecceereceaegagaarge CACCTTCCCCAAAGCTATGGACAACGTGACGTCCGGCAGGGGAGAGAGGGCCACCCTCAG GIGGACIATIGACAACCGGGTCACCCGGGTGGCTGGCTAAACCGCAGCACCATCCTCTA GIIGICCIICAGCAAAACAGIGGAIITAAAICICCIIGCACAAGCIIGAGCAACAC 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAACACAC ö Query Match
Best Local Similarity 100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; 61 61 121 121 181 181 241 301 361 361 241 301 121 g 8 8 g & g 8 8 8 8 8 ઠે

1260 960 780 900 960 1141 GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT
1141 GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAGAAATTGAAATTGCCTTGCAGATA 1441 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCCAGTGGGCAAGGCTCAGCCTC TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAATTCAATCA GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGC GGCCTCCAACAACTGGGCCACACAATGCCAGCATCATGCTATTTGGTCCAGGGCCGT GGCCTCCAACAAGCTGGGCCACACCAATGCCAGGCCATCATGATTGGTCCAGGCGCGGT CAGCGAGGTGAGCAACGCCACGTCGAGGAGGGCAGGCTGCGTCTGGCTGCTGCTTCTTCT GCCGCCACCACCACCACCACACACACCACAATGGCAACACCGACAACCAATCAGATA GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA GCTGCAGACAGACACACACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAGTATCTCC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACACATCTCCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 1321 1441 1501 1021 1081 1201 1201 1261 1321 661 1081 601 781 781 841 901 901 961 961 1021 541 541 721 721 121 481 601 661 481 8 8 8 d G à 용 원 8 8 ઠે 8 8 8 g 8 6 8 6 8 6 ઠ 셤 8 & 8 8 8 8 ď ò g

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98US-0081819P.
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98US-0081818P.
98US-0081818P.
98US-00825E8P.
98US-008270P.
98US-008270P.
98US-008318EP.
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98US-0018318P.
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 15-APR-1998 | 15
   GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGGGGGGGCTGCGGGGGCATTTG 1620
   1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560
                                                                    Human, ss, gene, secreted protein, transmembrane protein, PRO, cytostatic, ophthalmological, antiarthritic, osteopathic, antirheumatic, vulnerary; auditory; tumour growth, retinal disorder; sports-related joint problem, articular cartilage defects, sports-related joint problem, articular cartilage defects, osteoarthritis, rheumatoid arthritis, wound healing, hearing loss.
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Eaton Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L,

(GETH) GENENTECH INC

ö GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;

CIGCATAGCAACTGGTAGACCAGAGCCTACGGGTTACTTGGAGACACATCTCTCCCAAAGC ACAAAAGGGGACACTGCAGTGTGAAGCCTCACAGTCCCCTCAGCAGAATTCCAGTGGTA GGCCTCCAACAAGCTGGGCCACCAATGCCAGCATGCTATTTGGTCCAGGCGCCGT CTTCACGGGGCTGCTCTCTGTCTTCCAAGGAGTGCCCGTGCGCGAGGAGTGC TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC CAGCGAGGTGAGCAACGGCACGTCGAGGAGGCAGGCTGCGCTGTGGCTGCTGCTGCTCTTCT Н B & 8 6 6 6 6 8 8 8 qq र्घ क्ष द 음 중 음 \$ 8 \$ 6 6 6 6 6 B & B &

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CAGCGAGGTGAGCAACGCACGTCGAGGAGGCAGGCTGCGTCTGGCTGCTGCCTCTTCT 1140
                                                                                                                                                                                     Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothalial cell; glucose; FFA; skeleral muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; Tlymphocyte cell; endothalial cell tube formation; bone disorder; cartilage disorder; chountoid arthritis; chematoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
                                                                                                                                                                                                                                                                                                      1411 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC
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US2003199030-A1 Homo sapiens.

03-MAR-2000; 2000US-0187202P. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072. 28-MAY-2002; 2002US-00156841 23-OCT-2003.

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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from bindating the release of tumour necrosis and consider that the release of tumour necrosis factor-alpha (TNF-alpha) from bindating the release of tumour necrosis of proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adream). Ind., or proliferation or differentiation of chondrocyte cells and a method for colls, breast, procedure rectal, kidney, cervical and liver tumours). The polymucleotides are useful in gene therapy. The polymucleotides may also a research from an in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapoutically useful cuseful in the development and screening of therapoutically useful cuseful in the development and screening of therapoutically useful cuseful in the development and screening of therapoutically useful cuseful in the development and screening of therapoutically useful cuseful in the development in condition responsive to the polypeptides or antibodies are used in preparing an endipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating cuseful for teating sports cells, for stimulating effects are useful for teating sports related joint problems, articular cartilage are useful for treating sports-related joint problems, articular cartilage are useful for treating such as sports-related disorders such as various thalassaemias and rhemmaton articular cartilage are also useful for treating various mammalian haemoglobin many parefit from enhanced local imm
                                                                                                                                                                                                             Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.
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                       Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
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                                                                                                                                WPI; 2003-900159/82.
P-PSDB; ADD92510.
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ô 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Query Match
Best Local Similarity 100.
Matches 1679; Conservative

240 120 120 180 240 9 9 1 GITGIGITCCTTCAGCAAAACAGTGGATTTAAATCTCCCTTGCACAAGCTTGAGAGGAACAC 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 181 CTTCACGGGGCTGGCTCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGAGATGC GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 셤 à 셤 ò 유 ∂ g ò

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(GETH) GENENTECH INC

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99WO-US030911.
99WO-US030999.
99WO-US030720.
99WO-US031243.
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2001US-00854280.
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99WO-US028214.
99WO-US028313.
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis fector-alpha (TNF-alpha) from human blood, a method for stimulating the prosideration or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating captisants probes, in chromosome and gene mapping, in generating at the development and screening of the polymorleotides may also captisants. The Rew polypeptides by recombinant techniques and in the development and screening or knock-out animals which are useful in the development and screening or knock-out animals which are useful in the development and screening of the properties, such as tumours, for stimulating and inhibiting proliferation of multipoles, such as tumours, for stimulating and inhibiting proliferation of inner ear utribodies are used in preparing of figuration of anglocyte cells, for stimulating differantiation of inner ear utribular such as sports injuries and articular cartiage are useful for treating such as sports injuries and articular cartiage are useful for treating various mammalian hasmoglobin-associated disorders such as various thalassaemias and condition. This casociated disorders such as various thalassaemias and condition. This casociated disorders and manner system cell infiltration. This catcular cartiage are useful for treating various mammalian hasmoglobin-associated disorders such as various thalassaemias and condition. The sequence captesorte a unamn PRO polymoscide of the invention. Note: the sequence represents a unamn PRO purportide of the invention. This is the property of the in Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis. 120 120 180 9 9 1 GITGIGICCTICAGCAAAACAGIGGATITTAAATCTCCTIGCACAAGCTIGAAGAGCAACAC 1 dridigiccircaddaaadaddagriraaarcrectrocadaagcrreagagcaacac 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT Gao W; Gaps Deforge L, Desnoyers L, Filvaroff E, Ga A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; 0; Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Claim 2; SEQ ID NO 375; 636pp; English. 09-AUG-2001; 2001US-00927796. 16-AUG-2001; 2001US-00931836. 19-DEC-2001; 2001US-00028072. Baker KP, Beresini M, D Gerritsen ME, Goddard A, Smith V, Stewart TA, Tu (GETH) GENENTECH INC. WPI; 2003-900165/82. P-PSDB; ADD91406. 8XCCCCCCCCCCCCCCCCCCCCCCCCCCCCCX g à g ò ò

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01-MAR-2001; 2001MO-US008520.

09-MAR-2001; 2001WS-US006666.

14-MAR-2001; 2001WS-US0066689.

22-MAR-2001; 2001WS-00816744.

05-APR-2001; 2001WS-00816420.

10-MAY-2001; 2001WS-00854200.

10-MAY-2001; 2001WS-00854280.

18-MAY-2001; 2001WS-008660216.

25-MAY-2001; 2001WS-008660218.

25-MAY-2001; 2001WS-00866034.
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10-NOV-2000; 2000WO-US030873.
01-DEC-2000; 2000WO-US032878.
20-DEC-2000; 2000WS-00747259.
20-DEC-2000; 2000WS-00747259.
20-DEC-2000; 2000WS-007804955.
28-FEB-2001; 2001WS-00796498.
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, certor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, certorial and liver tumours). The prolyincleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and BNA and in gene therapy. The polyuncleotides may also a present in the development and screening of kerzapurically useful antisense RNA and BNA and in gene therapy. The polyuncleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of kerzapurically properties or antibodies are used in preparing a medicament for traating a condition responsive to the polypeptides or antibodies are used in preparing of medicament for traating a condition responsive to the polypeptides or antibodies are used in preparing of stimulating differentiation of adipocyte cells, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating differentiation of finner ear utricular supporting cells or 1-lymphocyte cells for inducing endochenial cell to the relating various manalish problems, articular cartilage are useful for treating sports injuries and articular cartilage are useful for treating sports related disorders such as various manalism heamedle form cartilage are useful for treating sports related disorders such as various manamalian heamedle form ceptement a benefit from enhanced local im
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A, Godowski PJ, Gurney AL, Sherwood S;
Tumas D, Watanabe CK, Wood WI, Zhang Z;
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Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;
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Gerritsen ME, Goddard A, Godowski
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22-JUN-2001; 2001WO-US020116.
29-JUN-2001; 2001WO-US021066.
09-JUL-2001; 2001WS-00908827.
18-JUL-2001; 2001US-00908827.
06-AUG-2001; 2001US-00924419.
09-AUG-2001; 2001US-00931836.
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Tumour necrosis factor alpha release; TNF-alpha release;
glucose uptake modulator; FR4 uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
clum tumour; colon tumour; breast tumour; prostett tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
                                                                                       AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA
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                                                 TATACAAATTAGAATTAGAAGAACACAGCCTCATGGGACAGAAATTTGAGGGGGGGAAC
                                                                           AAAGAATACTTTGGGGGAAAAGAGTTTTAAAAAGAAATTGAAATTGCCTTGCAGATA
                          Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various
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Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, She
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI,
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01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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P-PSDB; ADE32317.
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cartilage disorders, e.g. arthritis

SEQ ID NO 375; 636pp; English Claim 2; The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the crease of TNF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle calls or adipocyte cells, for glucose or FFA by skeletal muscle calls or adipocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of inner ear utricular supporting cells, cells, for stimulating the proliferation of inner ear utricular supporting cells, cor stimulating the proliferation of inner ear utricular supporting cells, cor stimulating the proliferation of inner ear utricular supporting cells, for atmulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of adipocyte cells, for stimulating proliferation of adipocyte cells, for stimulating proliferation of adipocyte cells, for stimulating proliferation of adipocyte cells, cervical or liver tumour is lung, colon, breast, certal, cervical or liver tumour is lung, colon, breast, certal, cervical or liver tumour is lung, colon, breast, certal, cervical or liver tumour is lung, colon, breast, certal, cervical or liver tumour is lung, colon, breast, certal, cervical or liver tumour is lung, colon, breast, certal cervical or liver tumour. The oligomicled to probes are useful for isolating openomic and cDNA mucleotide (I) is also useful as therapeutic agent the consone marker, and for generating of therapeutically useful reagents, in gene therapy, for chromosome leftentification, as chromosome marker, and for generating of chromosome identification, as chromosome marker, and for generating of chromosome leftentification, as chromosome marker, and for generating of sources. An anti-(I) are useful in diagnostic assays for PRO, ergonoces, and transmendrane PRO polypeptide.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

300 420 420 AATCTATCAGGAAAGAAAGAAAGAAAAACGGAACCTGACAAAAAAAGAAGAAAAAGAAG 120 240 240 480 480 540 120 180 AAGAAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGGAAT 180 360 gracactarragacaacceegraacceegraeccreecraaaccecaecaccarcerra 360 9 9 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGAGCGCCACCCTCAG TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAAC GITGIGICCTICAGCAAACAGIGGAITIAAAICTCCTIGCACAAGCITGAGAGCAACAC AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT CTTCACGGGGCTGGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC CTTCACGGGGCTGGCTCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGAGAAGA GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA TGCTGGGAATGACAAGTGCTGCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGCCCTTACACCTGCTC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC Gaps ; 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0; Query Match Best Local Similarity 100. Matches 1679; Conservative н 61 121 181 181 241 241 301 361 421 19 121 301 361 421 481 g ద 임 6 ò ò ઠે δ g ò 셤 à ò

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Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; artilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
                                                                                                                                                                                                                                                                                                             cDNA encoding human PRO polypeptide #188
                                                                                                                                                                          ADE22248 standard; cDNA; 1679 BP.
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98WO-USO12456.
98WO-USO114552.
98WO-USO19824.
98WO-USO19824.
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98WO-USO19933.
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PR 20-DEC-1999; 99W0-U5030999.
PR 32-DEC-1999; 99W0-U503021.
PR 30-DEC-1999; 99W0-U503021.
PR 24-FEB-2000; 2000W0-U503056.
PR 11-FEB-2000; 2000W0-U503056.
PR 11-FEB-2000; 2000W0-U503056.
PR 12-MAR-2000; 2000W0-U503056.
PR 20-MAR-2000; 2000W0-U503056.
PR 20-MAR-2000; 2000W0-U503059.
PR 20-MAR-2000; 2000W0-
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Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W; Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-900166/82. P-PSDB; ADE22249. Two hundred and seventy five nucleic acids encoding FRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone

cartilage disorders, e.g. arthritis. Claim 2; Fig 375; 638pp; English The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the prostation or differentiation of chondrocyte cells and a method for proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adremal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in chromosome and gene mapping, in generating a thybridisation probes, in chromosome and gene mapping, in generating a streams who and nn gene therapy. The polynucleotides may also a traisense RNA and an gene therapy. The polynucleotides may also conserved in preparing PRO polypeptides by recombinant techniques and in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of the apprehense of the stumours, for stimulating and inhibiting proliferation of martibodies, such as tumours, for stimulating and inhibiting proliferation of manner are are useful or modulating the uptake of stimulating differantiation of adipocyte cells, for stimulating cells or T-lymphocyte cells, for stimulating cells or T-lymphocyte cells, for inducing endothelial cells in medical as sports injuries and articular cartilage are useful for treating articus and intended are useful for treating articus and intended are useful for treating sortes sequence date of sequence also useful for treating articus and intended are useful for treating articus and may benefit from enhanced local immune system cell infilteration. Note: The sequence date for this patent is also various articus of the invention: the useful for treating various memorals and may benefit at seque

Seguence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

AAGAAAAAAATCCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 180 240 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGGCGCCACCCTCAG 300 AATCTATCAGGAAAGAAAGAAAAAAAAAACCGAACCTGACAAAAAAAGAAGAAAAAGAAG 120 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 180 CITCACGGGGCTGCTGTCTCTTCCTAGGAGTGCCCGTGCGCAGCGGAGATGC 240 CACCTTCCCCAAAGCTATGGACAACGTGACGTCCGGCAGGGGGAGAGCGCCACCCTCAG 300 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTTA 360 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCAAAC 420 recresea a reaccasor de conserve de conser GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 480 9 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 60 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC CTTCACGGGGCTGCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGTGC ö 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0; Best Local Similarity 100. Matches 1679, Conservative 61 . 19 121 121 181 181 241 241 361 361 421 301 301 Query Match δ 셤 ઠે 셤 ઠે 셤 ઠે 셤 à 셤 g ò g ð

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g	1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCCAAGCGTGGCGCGCGC
ò	1621 GTAGACTGTGCCACCACGGCGTGTGTGAAACGTGAAATAAAAAGGGCAAAAAAA 1679
qq	1621 GTAGACTGTGCCACCACGCGTGTGTTGTGTAAAAAAAAAA
RESULT ADD7947 ID AI	LT 92 8472 ADD79472 standard; cDNA; 1679 BP.
X X	2;
XE;	29-JAN-2004 (first entry)
(8)	CDNA encoding human PRO polypeptide #188.
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<u>\$</u> &	<pre>cancer, adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA;</pre>
¥ & &	skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utitular supporting cell; T-lymphocyte cell;
\$ & &	endochental cell tume lormation; bone disolate; cartiage disolati; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
žž	immune system cell infiltration.
SO ×	Homo sapiens.
38	US2003203428-A1.
12	30-OCT-2003.
₹E;	22-APR-2002; 2002US-00127852.
፞ ጜጜጜ	09-DEC-1999; 99US-0170262P. 01-DEC-2000; 2000MO-US032678. 19-DEC-2001; 2001US-00028072.
XÆ	(GETH) GENENTECH INC.
X II II I	Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W; Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S, Smith V, Stewart Tb, Thimas D, Watanabe CK, Wood WI. Zhang Z;
žĸ	875635/81.
ž ž	079473.
LEE	New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for the diagnosis, prevention and/or treatment of tumors, such as lung, colon, breast, prostate, rectal, cervical and/or liver
ξX	
S X	Claim 2; Fig 375; 637pp; English.
88	The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynuclectides encoding them. The
ខ្លួ	invention also relates to an antibody which specifically binds to a PRO polymentide, a method for stimulating the release of tumour necrosis
ខ្លួ	factoralpha (TNF-alpha) from human blood, a method for stimulating the recipility of differentiation of chondrower calls and a method for
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ខ្លួ	colon, breast, prostate, rectal, kinney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as
ខូខូ	hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polynucleotides may also
នូខ	be used in preparing PRO polypeptides by recombinant techniques and in

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cc useful in the development and screening of therapeutically useful cagents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of thuman microvascular endothelial cells for modulating the uptake of glucose or FPA by skeletal muscle cells, for modulating the uptake of stimulating differentiation of adipocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the proliferation of riner ear utricular supporting cells, for Typhocyte cells, for inducing endothelial cell tube formation and for treating cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and cartilage are useful for treating sports-related joint problems, arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanned longer is also avainable in electronic format from the USPTO website at segdata. Use various of the invention. Note: The sequence data for this pacent is also available in electronic format from the USPTO website at segdata.
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29-JAN-2004 (first entry)

Human cDNA encoding secreted/transmembrane protein, PRO337

Human, 88; gene; secreted protein; transmembrane protein; PRO; cytostatic; ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary; auditory; tumour growth; retinal disorder; sports-related joint problem; articular cartilage defects; osteoarthritis; rheumatoid arthritis; wound healing; hearing loss.

US2003203434-A1

30-OCT-2003

18-OCT-2001; 2001US-00145088

15-MAY-1998; 98US-0085689P.
08-MAR-1999; 99WG-US005028.
28-ARR-1999; 99US-0131445P.
25-AUG-1999; 99US-00380133.
18-FEB-2000; 2000WG-US004341.
30-UUL-2001; 2001US-00918585.

(GETH) GENENTECH INC.

Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL; Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME; Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Kljavin IJ, Kuo SS, Napier M, Wood MI, Paoni NF, Roy MA, Shelton DL; Stewart TA, Tumas D, Williams PM, Wood WI;

WPI; 2003-875641/81. P-PSDB; ADE35611.

New genes, and its encoded secreted and transmembrane polypeptides, useful for treating e.g. lung or breast tumors, osteoarthritis, rheumatoid arthritis, obesity, diabetes, hyperinsulinemia, hypoinsulinemia or wounds.

Claim 2; SEQ ID NO 522; 462pp; English.

The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% aniho acid sequence identity contransmembrane protein) having at least 80% aniho acid sequence declared signal in the specification (including PRO lacking its associated signal peptide). Also included are nucleic acids encoding the PRO proteins mentioned above, a vector comprising a PRO nucleic acid), a host cell comprising the vector and producing PRO, a chimaeric molecule comprising the vector and producing PRO, a chimaeric molecule comprising comprising the vector and producing PRO, a chimaeric molecule comprising a manino acid sequence, and an anti-PRO polypeptide in a sample suspected (containing PRO4993 polypeptide). Similarly, PRO4993 polypeptide is useful for detecting a PRO4993 polypeptide is useful for detecting projypeptide, and PRO1559 polypeptide is useful for detecting projypeptide, and PRO1559 polypeptide is useful for inking a bloactive molecule to a cell expressing PRO337 polypeptide. The bioactive molecule to a cell expressing PRO337 polypeptide; useful for linking a bloactive molecule to a cell expressing PRO4993 polypeptide is useful for linking a bloactive molecule to a cell expressing PRO4993 polypeptide or anti-PRO4993 polypeptide is useful for modulating the biological activity of the cell expressing PRO559 polypeptide; RRO700 or PRO739 polypeptide or anti-PRO4993 polypeptide or anti-PRO4993 polypeptide or anti-PRO4993 polypeptide is useful for modulating the biological activity of the cell expressing PRO599 polypeptide or anti-PRO4993 polyp

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PRO739 polypeptide is useful for modulating the biological activity of the cell expressing PRO725, PRO700 or PRO739 polypeptide. The polypeptides are useful for inhibiting tumour growth, retinal disorders, sports-related joint problems, artititing actilised defects, osteoarthritis or rheumatoid arthritis, wound healing and hearing loss immammals. The present sequence encodes a PRO protein.
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                                                                                                                              Score 1679; DB 1; Length 1679; Pred. No. 6.7e-05; 0; Mismatches 0; Indels 0;
                                                                                                     Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
                                                                                                                                 Query Match
Best Local Similarity 100.0%;
Matches 1679; Conservative 0
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PRO; antirheumatic; Human; ss; gene; secreted protein, transmembrane protein; PRO; cytostatic, ophthalmological; antiarthritic; osteopathic; antirher vulnerary; auditory; tumour growth; retinal disorder; sports-related joint problem; articular cartilage defects; osteoarthritis; rheumatoid arthritis; wound healing; hearing loss. Human cDNA encoding secreted/transmembrane protein, PRO337.

Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
Ferrara N, Filvaroff B, Fong S, Gao W, Gerber H, Gerritsen ME;
Goddard A, Godowski PJ, Grimaldi UC, Gurney AL, Hillan KJ;
Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
Stewart TA, Tumas D, Williams PM, Wood WI; 30-APR-1999; 98US-0083742P. 08-MAR-1999; 99WO-US005028. 23-UUN-1999; 99US-0141037P. 25-AUG-1999; 99US-00380138. 18-FEB-2000; 2000MO-US004341. 30-UUL-2001; 2001US-00918585. (GETH) GENENTECH INC.

New genes, and its encoded secreted and transmembrane polypeptides, useful for treating e.g. lung or breast tumors, osteoarthritis, rheumatoid arthritis, obesity, diabetes, hyperinsulinemia, hypoinsulinemia or wounds.

Claim 2; SEQ ID NO 522; 452pp; English

The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity to an amino acid sequence chosen from 94 fully defined sequences as given in the specification (including PRO lacking its associated signal comprising a PRO secrecially a PRO secrecial with or without its associated signal peptide, a PRO extracellular domain with or without its associated signal comprising to peptide, a PRO extracellular domain with or chimacric molecule comprising proteins and producing PRO, a chimacric molecule comprising to mentioned above, a vector comprising PRO, a chimacric molecule comprising to the peptide is useful for detecting a PRO39 polypeptide is useful for detecting prolypeptide in a sample suspected of containing PRO4993 polypeptide is useful for detecting prolypeptide, PRO725, PRO700 or PRO739 polypeptide is useful for detecting a profession or PRO739, PRO4993 polypeptide is useful for detecting a profession procession or PRO739 polypeptide is useful for inking a bloactive molecule to a cell expressing PRO37 polypeptide; PRO337 polypeptide; SPRO337 polypeptide; PRO337 polypeptide; PRO337 polypeptide; PRO337 polypeptide; PRO337 polypeptide; SPRO337 polypeptide; PRO337 polypeptid

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

0 Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;

720 960 120 120 180 180 240 240 300 300 360 360 420 420 480 480 540 540 600 600 999 099 720 780 780 840 840 900 900 960 9 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 841 ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGGTGAAAGTGGAAAACAGACCTTT 1 GTTGTGTCCTTCAGCAAAAACAGTGGATTTAAATCTCCCTTGCACAAGGTTGAACAC 61 AATCTATCAGGAAAGAAAAAAAAAAAACCGAACCTGACAAAAAAAGAAAAAAAGAAGAAG 181 CTTCACGGGGCTGGTGTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGGGCGCCACCTCAG 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGAGAGGGCGCCACCCTCAG 301 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGGCACCACCATCCTCTA 361 IGCTGGGAATGACAAGTGGTGCCTGGATCCTCGGGTGGTCCTTCTGAGCAACACCCAAAC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 601 CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 661 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 661 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 841 ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA .021 GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAAGGCGCCGT cricaceeecreecrerererererrereadadeeceeeceeearee GIGCACTATIGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCTTA TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC AGGGGACTACGAGTGCAGTCCCAATGACGTGGCCGCCCCCGTGGTACGAGAGTAAA 301 (1081 721 901 181 241 361 601 QQ g 8 8 8 & 8 B & B & B & 6 6 6 6 ઠે g 8 8 8 6 ठे 유 ò 쉱 8 8 à ö જે

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99US-00380138.
2000WO-US004341.
2001US-00918585.
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99WO-US000106.
99WO-US005028.
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18-PEB-2000;
30-JUL-2001;
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22-DEC-1998;
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The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity to an amino acid sequence chosen from 94 fully defined sequences as given in the specification (including PRO lacking its associated signal peptide, a PRO stracellular domain with or without its associated signal peptide, a PRO stracellular domain with or without its associated signal peptide, a PRO stracellular domain with or without its associated signal peptide, a PRO stracellular domain with or chimacric cell comprising the vector and producing PRO, a chimacric molecule comprising the PRO proteins and anti-PRO fused to a heterologous amino acid sequence, and an anti-PRO included are molecule is useful for detecting PRO337 polypeptide is useful for detecting propyeptide. PRO725, PRO700 or PRO725, PRO700 or PRO739 polypeptide is useful for detecting PRO337 polypeptide is useful for detecting PRO335 polypeptide is useful for district molecule to a cell expressing PRO337 polypeptide is useful for linking a bloactive molecule to a cell expressing PRO337 polypeptide is useful for linking a bloactive molecule to a cell expressing PRO337 polypeptide is useful for linking a bloactive molecule to a cell expressing PRO493 polypeptide is useful for linking a bloactive molecule to a cell expressing PRO493 polypeptide is useful for linking a bloactive molecule to a cell expressing PRO493 polypeptide is useful for modulating at least one biological activity of the cell expressing PRO493 polypeptide is useful for modulating the biological activity of the cell expressing PRO493 polypeptide is useful for modulating the biological activity of the cell expressing PRO493 polypeptide or anti-PRO35, condulating the biological activity of the cell expressing PRO493 polypeptide or anti-PRO35, condulating the biological activity of the cell expressing PRO493 polypeptide or anti-PRO35, condulating the biological activity of the cell expressing PRO493 polypeptide or anti-PRO35, condulating the biolo
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                 KP, Botstein D, Desnoyers L, Eaton DL;
E, Fong S, Gao W, Gerber H, Gerriteen ME;
PJ, Grimaldi JC, Gurney AL, Hillan KJ;
Napier MA, Pan J, Paoni NF, Roy MA, Shelton Willams PM, Wood WI;
                                                                                                                                                                                                                        New PRO genes and encoded secreted and transmembrane polypeptides, u
for treating e.g. lung or breast tumors, osteoarthritis, rheumatoid
arthritis, obesity, diabetes, hyperinsulinemia, hypoinsulinemia or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 522; 453pp; English.
                 AJ, Baker KP,
Filvaroff E,
Godowski PJ,
Kuo SS, Napi,
Tumas D, Wil
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Matches 1679; Conservative
                                                                                                                                                          WPI; 2003-875643/81
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                                                                                                                                                                                   P-PSDB; ADD73340.
                      Ashkenazi AJ,
                                       Ferrara N,
Goddard A,
Kljavin IJ,
Stewart TA,
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GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC

1 GITGIGICCITCAGCAAAACAGIGGAITITAAAICICCITGCACAAGCITGAGAGCAACAC

 181 CTTCACGGGGCTGGCTGTCTCTTCCAAGGAGTGCCCGTGCGCAGGAGATGC

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1679

1440 1500

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Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tummour necrosis factor-alpha; TNT-alpha; chondrocyte cell; tummour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; live; microvascular endothelial cell; glucose; PRA; skeletal muscle cell; adipocyte cell; perioyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
                                                                                                                             1441 CCCACTGCAAGCTGCATCGAACCTCTTTGGTGCCAGTGTGGCGCAAGGCTTCAGCCTC
1441 CCCACTGCAAGCTGCATGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC
                                                                                                                                                                                                   1501 TCTGCCCCACAGGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA
                                                                                                                                                                                                                                    GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTG
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                                                                                                                                                                                  TCTGCCCACAGAGTGCCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA
                                              AAAGAATACTTTGGGGGGAAAAGAGTTTTTAAAAAGAAATTGAAAATTGCCTTGCAGATA
                                                                              TTTAGGTACAATGGAGTTTTCCTTTTCCCAAACGGGAAGAACACAGCACCCCGGCTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various and/or cartilage disorders, e.g. arthritis.
                          aaagaatactttggggggaaagagttttaaaaaagaaattgaaaattgccttgcagata
                                                                                                                                                                                                                                                                                     Deforge L, Desnoyers L, Filvaroff E,
A, Godowski PJ, Gurney AL, Sherwood S
Tumas D, Watanabe CK, Wood WI, Zhang
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01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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Gerritsen ME, Goddard
Smith V, Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC.
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P-PSDB; ADE42009.
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CITCACGGGGCTGCTCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGAAGATGC
                                        CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCCTCAG
                                                      CACCTTCCCCAAAGCTATGGACAACGTGACGATCCGGCAGGGGGAGAGCGCCACCCTCAG
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the polypeptide, a method for stimulating the polypeptide, amethod for stimulating the prostero-alpha (TMF-alpha) from human blood, a method for stimulating the prostero or differentiation of chondrocyte cells and a method for proliferation or differentiation of chondrocyte cells and a method for consideration or differentiation of chondrocyte cells and a method for consideration probes, in chromosome and gene mapping in generating colon, breast, prostero, rectal, kidhey, cervical and liver tumours). The polymucleotides may also a netisense my proparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful useful in the development and screening of therapeutically useful useful in the development screening of therapeutically useful useful in the development of stimulating and inhibiting proliferation of medicament for treating a condition tesponsic and inhibiting proliferation of thuman microvascular endothelial cells, for modulating the uptake of glucose or FRA by skeletal muscle cells or medicament of inner an utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating treating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for modulating differation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injunities PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage are useful for treating sports indumented and trained considered from USPTO at segdata.uspto.gov/sequence.html Claim 2; Fig 375; 637pp; English

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

240 180 121 AAGAAAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGGAAT 180 CITCACGGGGCTGCTCTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC 240 CACCTTCCCCAAAGCTATGGACAACGTGACGTCCGGCAGGGGGAGAGCGCCACCTCAG 300 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTAAACCGCAGCACCATCCTCTA 360 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC 420 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 480 480 120 9 9 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC CTTCACGGGGCTGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGAAGGAATGC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGCCCCTTACACCTGCTC 1 GTTGTGTCCTTCAGGAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT Gaps ô 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; tive 0; Mismatches 0; Indels 0; Query Match 100. Best Local Similarity 100. Matches 1679; Conservative 61 121 361 181 241 301 421 181 241 301 361 421 셤 d 8 원 ò 셤 ò d ઠે 셤 ò 셤 ò

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481 GGTGCAGACAGACACCACAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 540 HIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	TICTICAGAIATCICCAITAATGAAGGAACAAIAITAGCCTCAC 6	TAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 6	TOAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 7	INFANCESANIACI INFENTATI CAGGGCAGGCAGGCAGGCAGGCAGGCAGGCAGGCAGGCA		TCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG E	GCAGTGTGAAGCCTCAGCAGCAGAATTCCAGTA 9	GCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 9	ACTGATTGAAGGAAAGGAGGGTGAAAGTGGAAAACAGACTTT 9	CTICTICAATGICTCTGIGAACAIGACTATGGGAACTACACTIGCGT 1	CIICITCAAIGICICIGAACAIGACIAIGGGAACIACACIIGCGI 1	GGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT	GGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT 1	CGGCACGTCGAGGAGGCAGCTGCGTCTGGCTGCTGCTCTTTT 1	こことのである。 こうこう こうこう こうこう こうこうこう こうこうこう こうこうこうこうこ	TCTCAAATTTTGATGTGAGTGCCACTTCCCCACCGGGAAAGGCT	ACCAACACAACAGCAATGGCAACACCGACAGCAATCAGTA 1	accaacacaacadeaategcaacaacaacaatcagata 1	AGAAGAAACACAGCCICATGGGACAGAAATITGAGGAGGGGAAC 1 	GGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA		GTTTTCTTTTCCCAAACGGAAGAACAACACCACACGCTTGGA	GITITICITITICCCAAACGGGAAGAACACAGCACACCCGGCTTGGA 1	ATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGCTCAGCCTC	arcerecarctriregieceaerereecaaeecreecere	CCCCCCACGIGGAACATICIGGAGCIGGCCAICCCAAATICAAICA	cccccacardaacarrcraaacraaccarccaaarrcaarca
GGTGCAGACAGACAAC 	CAAAATTGTAGAGATI 	CTGCATAGCAACTGGT 	GGTTGGCTTTGTGAGT	GGITGGCITIGIGAGI AGGGGACTACGAGIGC	AGGGGACTACGAGTGC	GGTCACCGTGAACTA1 	ACAAAAGGGGACACTC	ACAAAAGGGGACACTC	CAAGGATGACAAAAG/ 	CCTCTCAAAACTCATC	CCTCTCAAAACTCATC	GGCCTCCAACAAGCTC	GGCCTCCAACAAGCTC	CAGCGAGGTGAGCAAC		GGTCTTGCACCTGCT	GCCGCCACCACCACC	GCCGCCACCACCAC	TATACAAATGAAATTI TATACAAATGAAATTI	AAAGAATACTTTGGG		TTTAGGTACAATGGA	TTTAGGTACAATGGA	CCCACTGCAAGCTGC	cccacraccaagerac	TCTGCCCACAGAGTG	rcreccacadagre
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Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang
02-DEC-1999; 99W0-US028565.
20-DEC-1999; 99W0-US030095.
20-DEC-1999; 99W0-US0300911.
20-DEC-1999; 99W0-US0300911.
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30-DEC-1999; 99W0-US0300911.
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30-DEC-1999; 99W0-US0300911.
31-DEC-1999; 99W0-US0300911.
32-PEB-2000; 2000W0-US0004341.
32-PEB-2000; 2000W0-US0008149.
32-PEB-2000; 2000W0-US0008149.
33-PEB-2000; 2000W0-US0008149.
33-PEB-2000; 2000W0-US0013705.
33-PEB-2
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P-PSDB; ADE17826.
        GTCCATAGAGACGAACAGATGAGACCTTCCGGCCCAAGCGTGGCGCGCTGCGGGCACTTTG 1620
                                      1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTG 1620
                                                                                                    1621 GTAGACTGTGCCACCACGGCGTGTGTGAAACGTGAAATAAAAAGGGCAAAAAAA 1679
1621 GTAGACTGTGCCACCACGGCGTGTGTTGTGAAACGTGAAATAAAAAAGAGCAAAAAAA 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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98WO-US012456.
98WO-US012456.
98WO-US019824.
98WO-US019093.
98WO-US019137.
98WO-US019437.
98WO-US019437.
98WO-US019437.
98WO-US02292.
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98WO-US02292.
                                                                                                                                                                                                                                                                                     ADE17825 standard; cDNA; 1679
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99WO-US028551.
99WO-US028564.
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Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various and/or cartilage disorders, e.g. arthritis.

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NO 375; 637pp; English. ü The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for confidence or detecting the presence of tumour in a mammal (e.g. adremal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The prolymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating articles preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful useful in the development and screening of therapeutically useful useful in the development and screening of therapeutically useful useful in the development screening of therapeutically useful useful in the properties are useful in responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of adipocyte cells, for stimulating proliferation of adipocyte cells, for stimulating proliferation of adipocyte cells, for stimulating various bone and/or cartilage disorders such as sports injurises and cells, for cartilage are useful for treating sports-related joint problems, articular cartilage are useful for treating sports-related joint problems, articular cartilage are useful for treating sports-related joint problems, articular cartilage are useful for treating sports related goint problems, articular cartilage are useful for treating various mammalian hasmoglobine may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polymucleotide of the invention. This recommended the patch of the patch of the patch of the patch of t from USPTO at segdata.uspto.gov/sequence.html.

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Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

120 180 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGTGGGAAT 180 240 240 300 360 120 GIGCACTATTGACAACCGGGTCCACCCGGGTGGCTGGCTAAACCGCAGCACCATCTTA 360 420 9 9 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT CTTCACGGGGCTGGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGGGAGATGC CTTCACGGGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC 1 GITGIGICCTICAGCAAAACAGIGGATTIAAAICTCCTIGCACAAGCTIGAGAGCAACAC Gaps ö Ouery Match
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1020 1080 1140 1200 1200 1260 1260 1320 1380 1020 1080 600 900 999 999 720 720 780 780 840 840 900 900 960 960 480 841 ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGTA CAGCGAGGTGAGCAACGGCACGTCGAGGGGGGGGGCTGCGTCTGGCTGCTGTGCTCTTCT TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACACAGACACACCCGGCTTGGA CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GGTGCAGACAGCCACCCAAAGACCTCTAGGGTCCACCTCATGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGAGCCTACGTACTTGGAGACACATCTCTCCCAAAGC crecaraccaacrecracaccaaccraceerracriceacacacarcricecaaagc GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAAGACTC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCGCCGTGGTACGGAGAGTAAA Gercaccercaactarccaccaracarricagaagccaagggracaggrecccgrege ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGGTGAAAAGTGGAAAACAGACTTT CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGAAAACAGACCTTT CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT ccictcaaaactcatcticticaatgicticaacatgactatgggaactacgt GGCCTCCAACAAGCTGGGCCACACAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT GCCGCCACCACCACCACCACCACCACCAGCAATGGCAACACGCGACAGCAACCAATCAGATA **AAAGAATACTTTGGGGGAAAAGAGTTTTTAAAAAAAGAAATTGAAAATTGCCTTGCAGATA** CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC GGTGCAGACAGACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGC 196 196 1201 1321 1381 1021 1081 1081 1141 1141 1201 1261 1321 1381 1441 481 541 721 781 841 901 901 421 541 601 601 661 199 721 781 361 481 421

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1620 GTCCATAGAGACGAAACAGAATGAGACCTTCCGGCCCCAAGCGTGGCGTGGCGTGGCGGCATTTG 1620 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560 Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular modothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; artilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration. TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTG ADD91957 standard; cDNA; 1679 BP 97WO-USO05230. 98WO-US012456. 98WO-US014652. 98WO-US018034. 98WO-US019093. 98WO-US019094. 98WO-US019177. 98WO-US019177. 98WO-US019437. 98WO-US019437. 98WO-US019437. 98WO-US025108. 99WO-US000106. 99WO-US005028. 99WO-US005190. 2000WO-US006319. 99WO-US006615. Human PRO polynucleotide #188 99WO-US020111. 99WO-US020594. 99WO-US021090. 99WO-US0211547. 99WO-US021899. 99WO-US010733. 12-APR-2002; 2002US-00121053 99WO-US028313 29-JAN-2004 (first entry) US2003199053-A1 05-JAN-1999) 08-MAR-1999) 10-MAR-1999) 10-MAR-1999) 20-APR-1999) 14-MAY-1999) 01-SEP-1999) 08-SEP-1999) Homo sapiens. 31-MAR-1997; 12-UN-1998; 14-JUN-1998; 10-SEP-1998; 14-SEP-1998; 14-SEP-1998; 14-SEP-1998; 17-SEP-1998; 07-OCT-1998; 29-OCT-1998; 29-OCT-1998; 15-SEP-1999; 05-OCT-1999; 29-NOV-1999; 30-NOV-1999; 23-OCT-2003 ADD91957; 1501 1501 1561 1621 1621 1561 AD091957

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10-NOV-2000, 2000MO-USO33328.
11-NOV-2000, 2000MO-USO33328.
12-DEC-2000, 2000MO-USO33673.
12-DEC-2000, 2000MO-USO33678.
13-DEC-2000, 2000MO-USO33678.
14-MAR-2001, 2001MS-00906689.
14-MAR-2001, 2001WS-00808706.
14-MAR-2001, 2001WS-00808689.
14-MAR-2001, 2001WS-00808689.
15-MAY-2001, 2001WS-008084208.
10-MAY-2001, 2001WS-008084208.
10-MAY-2001, 2001WS-008660216.
25-MAY-2001, 2001WS-008660216.
25-MAY-2001, 2001WS-008660216.
25-MAY-2001, 2001WS-008660216.
25-MAY-2001, 2001WS-00866028.
25-MAY-2001, 2001WS-00866028.
25-MAY-2001, 2001WS-00866028.
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21-JUN-2001, 2001WS-0088636.
21-JUN-2001, 2001WS-0088636.
22-JUN-2001, 2001WS-0088636.
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09-AUG-2001; 2001US-00927796.
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11-FEB-2000; 2
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30-MAR-2000;
17-MAY-2000;
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Gao W;

Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

2003-900164/82. 08; ADD91958.

Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.

SEQ ID NO 375; 636pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the prosideration of a tumour in a mammal (e.g. adremal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polyuncleotides are useful in molecular biology, including uses as colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polyuncleotides are useful in molecular biology, including uses and in thisense RNA and in gene therapy. The polyuncleotides may also constrained either transgenic animals or knock-out animals which are cuseful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful et proparing a tumours, for stimulating and inhibiting proliferation of human microvascular andothelial cells, for modulating the uptake of glucose or FRA by Releast muscle cells, for stimulating differantiation of adipocyte cells, for stimulating collication of or gene expression in pericyte cells, for stimulating collication of inner ear utricular supporting and inhibiting collication of or gene expression in pericyte cells, for stimulating collication of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating cortificates are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO plypeptides which stimulasseemias and conditions which massociated disorders such as various human earlied of propertions of companced local immune system cells the invention. Note: the sequence

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

240 CITCACGGGGCTGGCTCTCTTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGAGTGC 240 CACCTTCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGCGCCACCCTCAG 300 AAGAAAAAAATCTATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTCTTGGGCAAT 180 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 360 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAAGAC 60 1 GITGIGICCITCAGCAAAACAGIGGAITIAAAICCCTIGCACAAGCTIGAGCAACAC AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT CTTCACGGGGCTGGCTGTGTGTCTCTTCCAAGGAGTGCCCGTGCGCGAGAGATGC Gaps °, Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; 61 61 121 121 181 181 241 241 301 ద ద 8 8 ઇ g ઠે 유 à ò

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                                                                                                                                                                                                                               GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCGCGGGCACTTTG 1620
  TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACACCACACCCCGGCTTGGA 1440
                                                                                                                                                                                                                                                                              GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTG 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; secreted and transmembrane protein; PRO; gene; ss;
Tumour necrosis factor alpha release; TNF-alpha release;
glucose uptake modulator; PRA uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
lump tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
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                                                                                         1441 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various and/or cartilage disorders, e.g. arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G.
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Matanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel human secreted and transmembrane protein PRO337 cDNA.
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02-JUN-1999; 99WG-US012252.
25-AUG-1999; 99US-00380137.
01-DEC-2000; 2000WG-US008439.
01-DEC-2001; 2001US-00028072.
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P-PSDB; ADE33421.
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To stimulating the proliferation of of gene expression in partiage, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the binding of the release of a cytokine from PBMC cells, for inhibiting the binding of A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, the presence of tumour in a mammal. The tumour is lung, colon, breast, corrival or liver tumour. The oligomort expenses or are useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding increation. A polymucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the corporation of therapeutically useful in the development and chromosome identification, as chromosome marker, and for generating of therapeutically useful in diagnostic assays for PRO, e.g. chromosome identification, as chromosome marker, and for generating of cromensome identification, as chromosome marker, and for generating cromesome activity purification of PRO from recombinant cell culture or natural cources. (I) and (II) are useful for tissue typing. This sequence encodes con a novel human secreted and transmembrane PRO polypeptide.
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Human; secreted and transmembrane protein; PRO; gene; ss;
Tumour necrosis factor alpha release; TNP-alpha release;
Juose uptake modulator;
cell proliferation stimulator; cell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
clup tumour; colon tumour; breast tumour; prostett tumour; rectal tumour;
cervical tumour; liver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                                                                                                   97WO-US005230

98WO-US0114556

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98WO-US011824

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98WO-US0119177

98WO-US0119177

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30-NOV-1999;
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31-DEC-1999;
02-DEC-1999;
02-DEC-1999;
16-DEC-1999;
16-DEC-1999;
22-DEC-1999;
23-DEC-1999;
31-DEC-1999;
06-TAN-2000;
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14-SEP-1998;
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29-OCT-1998;
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20-NOV-1998;
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10-MAR-1999;
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Novel human secreted and transmembrane protein PRO337 cDNA

2000WO-US004341. 2000WO-US004342. 2000WO-US004414. 18-FEB-2000; 22-FEB-2000;

> BP. RESULT 100 ADE33972 ID ADE33972 standard; cDNA; 1679

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W; Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-899790/82. P-PSDB; ADE33973.

Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.

Claim 2; SEQ ID NO 375; 636pp; English.

The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypepitides (I). (I) is useful for stimulating the release of TMF-alpha from human blood, for modulating the uptake of glucose or FRA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the release of proteoglycans from cartilage, for cells,

continulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the binding of the release of a cytokine from PBMC cells, for inhibiting the binding of A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonucleotide probes are useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. FNO is useful in assays to identify other proteins or molecules involved in binding interaction. A polymucleotide (II) encoding (I) is useful in chromosome contents of therapeutically useful in the development and preparation of FNO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and concenting of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes. An anti-(I)-antibody is useful in diagnostic assays for PNO, e.g. detecting its expression in specific cells, tissues or serum, and for affinity purification of PNO from recombinant cell culture or natural concess. (I) and (II) are useful for tissues typing. This sequence encodes a novel human secreted and transmembrane PNO polypeptide. 9 180 180 240 240 360 420 420 480 540 600 999 61 ARTCTATCAGGAAAGAAAGAAAGAAAAAAACCGAACCTGACAAAAAAAGAAAAAAGAAG 120 120 300 360 480 GGITGGCITIGIGAGIGAAGACGAATACTIGGAAAITCAGGGCAICACCCGGGAGCAGTC 720 60 9 301 GTGCACTAITGACAACGGGGTCACCGGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACCACATCTCCCCAAAGC Gricificational de la contrata del contrata del contrata de la contrata del contrata del contrata de la contrata del contrata del contrata de la contrata del contra AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT CTTCACGGGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAAGATGC 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCACCATCCTCTA TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GGTGCAGACAGACCACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 481 GGTGCAGACAGACAACCACCCAAAGACCTCTAAGGGTCCACCTCATTGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACACATCTCCCCAAAGC 1 GITGIGICCTICAGCAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC CTTCACGGGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC Gaps ;; 0 Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; н 361 121 181 181 301 421 481 541 541 501 601 199 888888888888888888888888888888888 셤 à 원 8 g 8 6 à g 상 점 8 8 ò ď à g ð 원 ò 8 8 (first entry)

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ADD80024 standard; cDNA; 1679

ADD80024 ID ADD800 XX AC ADD800

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Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; perioyte cell; inner ear utricular supporting cell; T-lymphocyte cell; anothelial cell tube formation; none disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
                                                       cDNA encoding human PRO polypeptide #188
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98WO-US012456

98WO-US0118884

98WO-US0118884

98WO-US019034

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98WO-US019034

98WO-US019034

98WO-US019030

98WO-US019030

98WO-US019030

98WO-US019019

98WO-US022901

98WO-US02291

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98WO-US02291

99WO-US020190

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99WO-US030011
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12-UUN-1998;
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14-SEP-1998;
14-SEP-1998;
17-SEP-1998;
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18-SEP-1999;
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24-FBB-2000; 24-FBB-2000; 21-FBB-2000; 02-MAR-2000; 02-MAR-2000; 12-MAR-2000; 20-MAR-2000; 21-MAR-2000; 21-MAR-2000; 22-MAY-2000; 22-MAY-2000; 22-MAY-2000; 22-MAY-2000;

17. MAY 2000; 2000MO-US014042.
22. MAY 2000; 2000MO-US014042.
30. MAY 2000; 2000MO-US014041.
02. JUN-2000; 2000MO-US014041.
02. JUN-2000; 2000MO-US012544.
28. JUL-2000; 2000MO-US025322.
24. AUG-2000; 2000MO-US023328.
08. NOV 2000; 2000MO-US023328.
09. DEC 2000; 2000MO-US033678.
01. DEC 2000; 2000MO-US033678.
01. DEC 2000; 2000MO-US033678.
02. DEC 2000; 2000MO-US033678.
03. MAX 2001; 2001US-008448.
05. ARX 2001; 2001US-0086628.
05. ARX 2001; 2001US-0086628.
05. ARX 2001; 2001US-0086638.
05. ARX 2001; 2001US-0086638.
05. ARX 2001; 2001US-0086638.
06. AUG-2001; 2001US-0086638.
06. JUN-2001; 2001US-0086638.
06. JUN-2001; 2001US-00886879.
06. JUN-2001; 2001US-00886879.
06. JUN-2001; 2001US-00886879.
06. JUN-2001; 2001US-00898879.
06. JUN-2001; 2001US-00908877.
06. AUG-2001; 2001US-00908877.
06. AUG-2001; 2001US-00908877.

(GETH) GENENTECH INC

Gao Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G? Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-875867/81. P-PSDB; ADD80025.

New PRO nucleic acid, useful for manufacturing a medicament for diagnosing or treating tumor, for chromosome mapping or for tissue

Claim 2; Fig 375; 638pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypeptides them. The invention also relates to an antibody which specifically binds to a PRO polypeptide a method for stimulating the release of tumour necrosis factor-alpha (TWF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung,

colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as antication probes, in chromosome and gene mapping, in generating antication probes, in chromosome and gene mapping, in generating antication probes, in chromosome and gene mapping, in generating antication probes, in chromosome and special antication generating either transgenic animals or knock-out animals which are used in preparing at manipodies, such as tumours, for stimulating of the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of thuman microvascular endothelial cells, for modulating proliferation of adipocyte cells, for stimulating of proliferation of adipocyte cells, for stimulating the uptake of stimulating of or gene expression in pericyte cells, for stimulating the proliferation of anner ear utricular supporting cells, for stimulating cells, for stimulating endothelial cells for stimulating and condition and for treating various bone and/or cartilage disorders such as sports injuries and cells, for stimulating cells, for stimulating endothelial cells formation and for treating various as sports injuries and and/or cartilage disorders such as sports injuries and conditions which stimulate the release of proceoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassemias and conditions which sequence encodes a human PRO polypeptide of the invention. Note: The sequence encodes a human PRO polypeptide of the invention. Note: The sequence date for this patent is also available in electronic format from the useful for the useful seconds of the invention.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

240 300 120 180 180 120 9 CITCACGGGGCTGCTCTCTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAATGC aatictaticaggaaagaaagaaagaaabaaaaaaaccgaacctgacaaaaaagaaagaaagaag 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT CACCTTCCCCAAAGCTATGGACAACGTGAGGGTCCGGCAGGGGGAGGGCGCCACCCTCAG CTTCACGGGGCTGCTCTTCTTCTTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC 0; Gaps Query Match
100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; 181 241 н 181 241 g g ВÞ ઠે 셤 ò g &

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Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; PFA; skeletal muscle cell; adipocyte cell; pericyte cell; menticyte cell; pericyte cell; cell; pericyte cell
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                                              ADD93061 standard; cDNA; 1679
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RESULT 102
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Homo sapiens.

US2003194768-A1.

16-OCT-2003.

21-MAY-2002; 2002US-00152371.

03-MAR-2000; 2000US-0187202P. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC

3 Gao Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Ga Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

2003-899787/82. P-PSDB; ADD93062. Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.

Claim 2; SEQ ID NO 375; 636pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polymucleotides may also cancisense RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in casents. The PRO polypeptides by recombinant techniques and in casents. The PRO polypeptides or knock-out animals which are used in the development and screening of therapeutically useful caseful in the development and screening of therapeutically useful caseful in the development and screening of therapeutically useful captument for treating a condition responsive to the polypeptides of antibodies, such as tumours, for stimulating and inhibiting proliferation of or gene expression in perioyte cells, for stimulating cubmulating cubmuses or FRA by skeletal muscle cells, for stimulating cubmusers or proliferation of adipocyte cells, for stimulating cubmusers or proliferation of adipocyte cells, for stimulating cubmusers or proliferation of adipocyte cells, for stimulating cubmusers and colls, for inducing endothelial cells upperformed cells, for reating endothelial cells, for modulating and cubmusers and any articulate and articulates which stimulate the release of proteoglycans arthritis. PRO polypeptides which stimulate the release of proteoglycans

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from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobinassociated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polynucleotide of the invention. Note: The sequence data for this patent is also available in electronic format from USPIO at seqdata.uspto.gov/sequence.html.
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                                                                                                           Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0;
                                                                                          Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
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1380 1380 1440 1500 1500 1020 1020 1200 1560 Human, ss, gene, secreted protein; transmembrane protein, PRO; cytostatic; ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary; auditory; tumour growth; retinal disorder; sports-related joint problem; articular cartilage defects; osteoarthritis; rheumatoid arthritis; wound healing; hearing loss. GCCGCCACCACCACCACCAACAACAACAATGGCAACACCCGACAACCACCAATCAGATA AAAGAATACTTTGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCCTTGCAGATA TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACAGCACACACGCGCTTGGA TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA CAGCGAGGTGAGCAACGGCACGTCGAGGAGGGAGGCTGCGTTCTGGCTGCTGCTCTCTTCT AAAGAATACTTTGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA TITAGGIACAAIGGAGIITITCTITICCCAAACGGGAAGAACACACACACCCCGGCIIGGA cccacrecaaccrecarcerecaaccrerrregreceaegecaaggecree GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGGCACTTTG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAAGTGGAAAACAGACCTTT GGCCTCCAACAAGCTGGGCCACAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT caccaacercaaceaceacercaaceaceaceaceaceaceacercacercaceacercacercacerca GGTCTTGCACCTGCTTCTCAAATTTTTGATGTGACTGCCACTTCCCCACCCGGGAAAGGCT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT GCCGCCACCACCACCACACACACAACAGCAACGCAACCAACCAATTCAGATA cecaeracaageracarecaacererringeraceagrangeageaagegeree TCTGCCCACAGAGTGCCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA encoding secreted/transmembrane protein, standard; cDNA; 1679

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comprising the vector comprising a PRO nucleic acid), a host cell comprising the vector and producing PRO, a chimaeric molecule comprising C PRO (Breed to a heterologous amino acid sequence, and an anti-PRO antibody. PRO337 polypeptide is useful for detecting a PR04993 polypeptide is useful for detecting PRO337 polypeptide is useful for detecting a PR0155 polypeptide, and PR01559 polypeptide is useful for detecting a PR0155 polypeptide, and PR01559 polypeptide is useful for detecting pR0337 polypeptide is useful for detecting a broactive molecule to a cell expressing PR0337 polypeptide. The bioactive molecule to a cell expressing PR04993 polypeptide; pR0752, CC molecule to a cell expressing PR04993 polypeptide; pR0752, CC pR0700 or PR0739 polypeptide; an useful for linking a bioactive molecule to a cell expressing PR04993 polypeptide; and PR01559 polypeptide; continying a bioactive molecule to a cell expressing PR04993 polypeptide; continying a bioactive molecule to a cell expressing PR0377 polypeptide; where the cell expressing PR03725, CC pr040799 polypeptide. PR04993 polypeptide; modulating at least one biological activity of the cell expressing PR0379 polypeptide; modulating the biological activity of the cell expressing PR0359 polypeptide; pr0404993 polypeptide; modulating the biological activity of the cell expressing PR0359 polypeptide; pr0404993 polypeptide or anti-PR04993 polypeptide or anti-PR04993 polypeptide or anti-PR04993 polypeptide; pr0404993 polypeptide or anti-PR04993 polypeptide; pr0404999 polypeptide or anti-PR04999 poly
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATCTATCAGGAAAGAAAGAAAAAAAAAACCGAACCTGACAAAAAAAGAAAAAGAAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GITGIGICCTICAGCAAAACAGIGGATITIAAAICTCCTIGCACAAGCITGAGAGCAACAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTGCAGACAGCCACCCAAAGACCTCTAGGTCCACCTCATTGTGCAAGTATCTCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New secreted and transmembrane PRO nucleic acids and polypeptides, useful for stimulating the release of tumor necrosis factor alpha from human blood and stimulating the proliferation of differentiation of chondrocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KP, Botstein D, Desnoyers L, Eaton DL;
E, Fong S, Gao W, Gerber H, Gerritsen ME;
Pay, Grimaldi JC, Gurney AL, Hillan KJ;
Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 2; SEQ ID NO 522; 462pp; English.
                                                                                                                                                                                                                                                                                                                                                                                99WO-US005190.
99WO-US008313.
99WO-US010733.
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99WO-US028565.
99WO-US030095.
                                                                                                                                                                                                                98WO-US021141.
98WO-US024855.
99WO-US004855.
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2000WO-US006319.
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2001WO-US009552
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Filvaroff E, I
Godowski PJ, (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kuo SS,
Tumas D,
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                        US2003194781-A1
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30-NOV-1999;
02-DEC-1999;
16-DEC-1999;
30-DEC-1999;
05-JAN-2000;
06-JAN-2000;
06-JAN-2000;
11-FEB-2000;
18-FEB-2000;
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30-MAY-2000; 2
02-JUN-2000; 5
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30-MAR-2000;
17-MAY-2000;
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Goddard A, G
Kljavin IJ,
Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAY-2001;
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1380 1020 1020 1080 1080 1140 1140 1200 1260 1320 1320 1380 1440 1440 1500 1500 1560 1620 1620 960 960 840 840 600 9 999 780 780 CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT 1021 GGCCTCCAACAAGCTGGGCCACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCGT CAGCGAGGTGAGCAACGGCCGCGTCGAGGGCAGGCTGCGCTCTGGCCTCTTCT 1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCACCACAATTCAATCA CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCCAAAGGGCTCAGCCTC CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGGAAGGCTCAGCCTC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAAGGGGGTGAAAAGTGGAAAACAGACCTTT AGGGGACTACGAGTGCCTCCAATGACGTGGCCGCCCCGTGGTACGAGAGTAAA GGCCTCCAACAAGCTGGGCCACACCAATGCCAACCATCATGCTATTTGGTCCAGGCGCCGT CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC CTGCATAGCAACTGGTAGACCCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCCAAAGC 106 1081 1441 961 1261 1381 1441 196 1021 1081 1561 541 661 721 781 781 901 601 601 661 721 541

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ADE19481 standard; cDNA; 1679 RESULT 10 ADE19481

ADE19481;

(first entry) 29-JAN-2004 Human PRO polynucleotide #188.

Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tummour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tummour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; periovte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; artilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarhritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.

Homo sapiens.

US2003199025-A1.

21-MAY-2002; 2002US-00152385

03-MAR-2000; 2000US-0187202P. 10-NOV-2000; 2000WO-US030873. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

3 Deforge L, Desnoyers L, Filvaroff E, G A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Baker KP, Beresini M, Gerritsen ME, Goddard Smith V, Stewart TA,

WPI; 2003-900156/82. P-PSDB; ADE19482.

Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various and/or cartilage disorders, e.g. arthritis.

Claim 2; SEQ ID NO 375; 648pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation of differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful medicament for treating a condition responsive to the polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of plucose or FRA by skeletal muscle cells for modulating the uptake of stimulating differentiation of adipocyte cells, for stimulating

te, for stimulating cells or T-lymphocyte and for treating trs injuries and asse of proteoglycans ed joint problems, matchd arthritis. PRO and conditions which infiltration. This in electronic format in electronic format of ther; other; and to Gaps 0;			AACAATATTAGCCTCAC 600
n of or gene expression in pericyte cellation of inner ear utricular supporting nducing endothelial cell tube formation and/or cartilage disorders such as sponsolypeptides which stimulate the relate of polypeptides which stimulate the relate are useful for treating sports-relate rilage defects, osteoarthritis and rhen sorders such as various thalassaemias from enhanced local immune system cell sesents a human PRO polynucleotide of the data for this patent is also available t sequata.uspto.gov/sequence.html. 9 BP, 498 A, 432 C, 419 G, 330 T, 0 U, (100.0%; Score 1679; DB 1; Lelarity 100.0%; Pred. No. 6.78-05; Conservative 0; Mismatches 0; II	AAAACAGTGGATTTAAAT AAAGAAAGAAAAAACGG AAAGAAAAAAAACGGAAAACGGAAAACCGGCAAA GAAAACCATCCAGCCAAA GAAAACCATCCAGCCAAA TGCTCTGTGTCTTTCCA TGCTCTGTGTCTTTCCA	CACCTTCCCAAAGCTATGGACAACGTGACGGCGCGCGGGGGGGG	CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAGGGAACAATATTGGCCTCAC CAAAATTGTAGAGAGTTTCTCAGATATCTCCATTAATGAGGGAACAATATTAGCCTCAC CAAAATTGTAGAGATTCTCAGATATCTCCCATTAATGAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCTAGGGTTACTTGGAGACACATCTCTCCCAAAGC CTGCATAGCAACTGGTAGACCAGAGCCTAGGGTTACTTGGAGACACATCTCTCCCAAAGC CTGCATAGCAACTGGTAGACGAGACCTAGGAATACTTGGAGACACACTCTCCCCAAAGC GGTTGGCTTTGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC GGTTGTAGTGAGTGAAGACCAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC AGGGGACTTGTTGTTATTTTTTTTTT
proliferation the prolifer, cells, for in various bone arthicular ca arthicular ca privating articular ca privation articular ca privation articular articul	1 1 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3	41 91 91 81 81	541 541 601 601 661 721 721
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liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.

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Mismatches

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Conservative

Matches 1679;

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121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT CTTCACGGGGCTGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCAGAGATGC crrcadesecrescrerererererererereaseaseseceseseseseseseseseses CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCCTCAG

1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCCTTGCACAAGCTTGAGAGCAACAC

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Homo sapiens.

US2003199026-A1

23-OCT-2003

20-MAY-2002; 2002US-00152393

03-MAR-2000; 2000US-0187202P.

01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

ž Gao Deforge L, Desnoyers L, Filvaroff E, G: A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Baker KP, Beresini M, Gerritsen ME, Goddard Smith V, Stewart TA,

WPI; 2003-900157/82. P-PSDB; ADE18930.

bone hundred and seventy five nucleic acids encoding PRO polypeptides, inl for treating pericyte-associated tumors, diabetes and various 'or cartilage disorders, e.g. arthritis. useful and/or Two

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TGCTGGGAATGACAAGTGGTGCCTGGATCCTTGGGTCCTTCTGAGCAACACCAAAC

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GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC

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GIGCACIATIGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTTA GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA

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2; SEQ ID NO 375; 636pp; English. Claim

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polypucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the invention also relates to an antibod which specifically binds to a PRO polypeptide, a method for stimulating the proliferation of differentiation of chondrocyte cells and a method for proliferation probes, in thromosome and gene mapping in generating the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping in generating an intense mapping properties by recombinant techniques and in generating either transgenic animals or knock-out animals and in generating and intense of percenting either transgenic animals or knock-out animals and in generating caseful in the development and screening of therapeutically useful reagents. The PRO polypeptides by recombinant techniques and in generating and edvelopment for treating a condition responsive to the polypeptides or medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of glucose or EPA by skelectal muscle cells, for stimulating differentiation of adipocyte cells, for stimulating various bone and/or cartilage disorders such as sports injunities and cells, for stimulating various bone and/or cartilage disorders such as sports injunities proceed arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides which stimulation and contributions which may benefit from enhanced local immune system cell infilteration. This sequence represents a buman PRO polypurolectide of the inve at seqdata.uspto.gov/sequence.html. from USPIO

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

Query Match Best Local Similarity

cercreanalecreretrenengarereregaearangeanangeanetreere GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT GECCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT 1021 1021 961 상 원 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05;

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CCTCTCAAAACTCATCTTCTAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT

961

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CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACACATCTCTCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGGCATCACCCGGGAGCAGTC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAATTCAGGGCATCACCCGGGAGCAGC AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCGTGGTACGGAGAGTAAA

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us-10-017-084a-522.rng

19-DEC-2001; 2001US-00028072

(GETH) GENENTECH INC.

.. Z Gao Baker KP, Beresiní M, Deforge L, Desnoyers L, Filvaroff E, Ga Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-900162/82. P-PSDB; ADE43126.

Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.

Claim 2; Fig 375; 636pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TRF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidhey, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as a nice properties are useful in molecular biology, including uses as the bybridisation probes, in chromosome and gene mapping, in generating antibene RNA and DNA and in gene therapy. The polymucleotides may also consistent transgenic animals or knock-out animals which are seeful in the development and screening of therapeutically useful reagents. The RNO polypeptides or antibodies are used in preparing of medicament for treating a creening of therapeutically useful consistent of the proliferation of antibodies, such as tumours, for simulating and inhibiting proliferation of condition responsive to the polypeptides or antibodies, such as tumours, for simulating and inhibiting proliferation of inner ear urricular supporting cells, for stimulating the proliferation of inner ear urricular supporting cells, for stimulating cells, for inducing endothelial cells of administry and related joint problems, arthritis. PRO polypeptides which stimulate the release of proteoglycans (from cartilage are useful for treating sports-related joint problems, arthritis. PRO polypeptides which stimulate the release of proteoglycans (from cartilage defectes, osteoarthitis and rheumacoid arthritis proliferation of an university of associated disorders such as various thalassamias and conditions which stimulations which sequence represents a hu from USPTO at segdata.uspto.gov/sequence.html.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

ó 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0; Matches 1679; Conservative Similarity Query Match Best Local S ò

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ADE43125 standard; cDNA; 1679 BP 29-JAN-2004 ADE43125; ADB43125
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(first entry)

Human PRO polynucleotide #188.

Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; brosst; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FPA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; sendothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;

immune system cell infiltration

Homo sapiens

23-OCT-2003.

28-MAY-2002; 2002US-00156845

05-JUN-2000; 2000US-0209832P.

US2003199033-A1

Db 1321 AAAGAATACTTTGGGGGAAAAGAATTGAAAATTGCCTTGCAGATA 1380 Qy 1381 TTTAGGTACAATGGAGTTTTCTTTTCCCAAAGGGAAGAACACGCACCCGGCTTGGA 1440 Db 1381 TTTAGGTACAATGGAGTTTTCTTTTCCCAAAGGGAAGAACACGCACCCGGCTTGGA 1440 Qy 1441 CCCACTGCAAGGTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCT 1500 Db 1441 CCCACTGCAAGGTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCTC 1500 Qy 1501 TCTGCCCACAGAGTGCCCCCAGTGGAACAGTTCGAAGGCTCAGCTC 1500 Db 1501 TCTGCCCACAGAGTGCCCCCAGTGGAACAGTTCTGGAGCTGGGCAAGGGCTCAGCTTC 1500 Cy 1501 TCTGCCCACAGAGTGCCCCCAGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560 Db 1501 TCTGCCCACAGAGTGCCCCCAGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560 Cy 1561 GTCATAGAACGAACAGAATCAGACCTTCCGGCCCACGCGGCGCGCGC	ADD95914 standard; CDNA; 1679 BP. X ADD95914 standard; CDNA; 1679 BP. X ADD95914; X ADD95914; X ADD95914; X ADD95914; X ADD95914; X Buman PRO polymucleotide #188. X Human PRO	
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241 CACCTTCCCCAAAGCTATGGACAACGTGACGGCAGGGGGGGG	CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACCATCTCTCCCCAAAGC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACCATCTCTCCCCAAAGC CGGTTCGCAACTGGTAGAACCAACCAGACCTTACGTTGGAACTCTCTCCCCAAAGC GGTTCGCCTTTGTTGTTTGTTGTTTGAAATTCAGGCCATCGTACCCGGGAGCAGTAAAAGGGAACTTCACCAGGACACTTCTCCCCAAAGC GGTTCGCCTTAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTAAAAAGGAACTACCCCGGGAGCACTCCCCGGGAGCAGTAAAAAGGAACTACCCCTCAACAGGCACTCCCCTGGAGCAGTAAAAAAAA	

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11-AUG-2000; 2000WO-US022031.
23-AUG-2000; 2000WO-US023522.
23-AUG-2000; 2000WO-US023522.
01-DEC-2000; 2000WO-US030873.
01-DEC-2000; 2000WO-US030873.
01-DEC-2000; 2000WO-US030873.
02-DEC-2000; 2000WO-US030873.
03-B-FEB-2001; 2000WO-US0308956.
03-MAR-2001; 2001WS-00796498.
03-MAR-2001; 2001WS-0080669.
03-MAR-2001; 2001WS-0080669.
03-MAR-2001; 2001WS-0080669.
05-APR-2001; 2001WS-00866216.
05-APR-2001; 2001WS-00866216.
05-ARY-2001; 2001WS-00866216.
05-ARY-2001; 2001WS-008660216.
05-MAY-2001; 2001WS-008660216.
05-MAY-2001; 2001WS-008660216.
05-MAY-2001; 2001WS-008660216.
05-MAY-2001; 2001WS-008660216.
05-MAY-2001; 2001WS-008660216.
01-JUN-2001; 2001WS-008660216.
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14-MAY-1999;

02-JUN-1999;

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22-JUN-2001;
29-JUN-2001;
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adremal, luig, coll, breast, proseate, rectal, kidney, cervical and liver tumours). The prolymucleotides are useful in molecular biology, in generating and insense RNA and BNA and in game therapy. The polymucleotides may also arisense RNA and BNA and in game therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapourically which are useful in the development and screening of therapourically preparing of medicament for treating a condition responsive to the polypeptides or antibodies are used in preparing of medicament for treating a condition responsive to the polypeptides or antibodies are useful in preparing of for scrimulating differentiation of adprocyce cells, for modulating the uptake of glucose or FPA by skeletal muscle cells or adipocyte cells, for stimulating differentiation of alphocyce cells, for stimulating differentiation of adpocyce cells, for stimulating differentiation of adpocyce cells, for stimulating and cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating cells or treating various bone and/or cartilage disorders such as sports induced and articular cartilage are useful for treating various mammalian hammed local immune system cell infilteration. The sequence represents a human PRO polymucleotide in electronic formet sequence data for this patent is also veful. Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis. Deforge L, Desnoyers L, Filvaroff E, Ga A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Baker KP, Beresini M, Deforge L, Gerritsen ME, Goddard A, Godowski Smith V, Stewart TA, Tumas D, Wat Claim 2; Fig 375; 638pp; English. 09-JUL-2001; 2001MO-US021735. 18-JUL-2001; 2001US-00908827. 06-AUG-2001; 2001US-00924119. 09-AUG-2001; 2001US-00931836. 19-DEC-2001; 2001US-00028072. (GETH) GENENTECH INC. WPI; 2003-900168/82. P-PSDB; ADD95915.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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19-JUN-2001, 2001US-00886342.
20-JUN-2001; 2001WG-US019692.
22-JUN-2001; 2001WG-US020116.
29-JUN-2001; 2001WG-US020116.
09-JUL-2001; 2001WG-US020135.
18-JUN-2001; 2001US-00908827.
06-AUG-2001; 2001US-00924419.
09-AUG-2001; 2001US-00921836.
19-DEC-2001; 2001US-00921836.
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(GETH) GENENTECH INC.

3 Gao Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Ga Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-900169/82. P-PSDB; ADE22801.

Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.

Claim 2; Fig 375; 638pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TMF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adremal, ing the presence of a tumour in a mammal (e.g. adremal, ing) the presence of a tumour in a mammal (e.g. adremal, ing) to colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology in generating thy probables are useful in molecular biology, in generating the proparing PRO polypeptides by recombinant techniques and in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful as tumours, for stimulating of indication of organization of animal microvascular endothelial cells, for modulating the uptake of stimulating differentiation of inner ear utricular supporting of stimulating endothelial cells, for stimulating cells and of inner ear utricular such as sports injuries and articular articular cartilage are useful for treating various mammalian has modolopment of organization that associated joint problems, complete are useful for treating various mammalian has modolopment of sequence and unan PRO polypeptide of the invention. Note: The sequence data for this patent is also organizable of the invention. Of the USPTO website at sequence animanner system cell in electronic format from the upper cells in electronic format from the u

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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16/91	0; Gaps	TGAGAG	TGAGAG
rength	Indels	CACAAGCT	CACAAGCT
DB 1;	0	CTCCTTG	TCCTTG
100.0%; Score 1679; DB 1; Length 1679;	0; Mismatches 0; Indels	1 GTTGTGTCCTTCAGCAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 60	1 GITGIGCCTICAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 60
100.0%;	tive 0	CAGCAAAAC	CAGCAAAAC
1 2 2 4 4 5 5	Conserva	TGTGTCCTT	TGTGTCCTT
Query Match	Matches 1679; Conservative	1 GT	1 9
Quei	Matc	ò	οp

⁶¹ AATCTATCAGGAAAGAAAGAAAAAAAACCGAACCTGACAAAAAAGAAGAAAAAAGAG 120

1201 GCCGCCACCACCACCACCACCACCACCACCACCACCACCA	ABSULT 109 AD79918 standard; CDNA; 1679 BP. X A D779918; XX AD79918; XX AD79918; XX AD79918; XX AD79918; XX CDNA encoding human PRO polypeptide #188. ED STAN-2004 (first entry) XX CDNA encoding human PRO polypeptide; transmembrane polyp
61 AATCTATCAGGAAAGAAAGAAAAAACCGAACCTGACCAAAAAGAAGAAAAAGA 120 121 AAGAAAAAAAAACATGAACAACATCCAGCCAAAAATGCACATTCTATCTCTTGGGCAT 180 181 CTTCACGGGGCTGGTGTCTTCTTCCAAGGAGTGCCGTGCGCAGCAGATTC 240 181 CTTCACGGGGCTGGTTGTTCTTTCCAAGGAGTGCCGTGCGCAGAATTC 240 181 CTTCACGGGGCTGGTTGTTCTTTCCAAGGAGTGCCGTGCGCAGAATTC 240 241 CACCTTCCCCAAAGCTTTGGACAACGTGTTCTTCCAAGGAGTGCCGTGCGCAGAATTC 240 241 CACCTTCCCCAAAGCTTATGGACAACGTGACGGAGGGGCGAGGGGGGGG	601 CTGCATAGCAACTGGTAGACCAGAGCTAACTGGAGACACATCTCCCCAAAGC 660 601 CTGCATAGCAACTGGTAGACCCTAGGGTTACTTGGAGACACACTCTCCCCAAAGC 660 661 GGTTGGCTTTTGTGAGTGGAGACCCTAGGGTTACTTGGAGACACACTCTCCCCAAGC 660 661 GGTTGGCTTTTGTGAGTGAGACCAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 720 661 GGTTGGCTTTTGTGAGTGAGACAATACTTGGAAATTCAGGGCATCACCGGGAGCAGTC 720 721 AGGGGACTACGGAGTGCAGTGCCTCCAATTCAGAAATTCAGGGCATCACCGGGAGCAGTC 720 721 AGGGGACTACGGAGTGCAGTGCCTCCAATTCAGAAATTCAGGGCATCACCGGGAGCAGTAA 780 722 AGGGGACTACGGAGTGCAGTGCACTCCCCAATTCAGAGCATCACCGGGAGACATAA 780 781 GGTCACCGTGAACTATCCACCATTACATTTTCAGAAGCCCAGGGCACAGGTACAGGTGCCCGTGGG 840 841 ACAAAAGGGGAACTACCACATACATTTTCAGAAGCCCAAGGGTACAGGTGCCCCGTGGG 840 841 ACAAAAGGGGAACTACACATTTCAAAAGCCCCAAGGAGAAATTCCAGTGGTA 900 841 ACAAAAGGGGAACTACACATTTAAAAAAGAAGCCAAGAAATTCCAGTGGTA 900 841 ACAAAAGGGGAACACTGCAACATGACATCCCCCCCAAGAAATTCCAGTGGTA 900 841 ACAAAAAGGGAACACTGCAACATGACATCCCCCCAAGAAATTCCAGTGGTA 900 841 ACAAAAAGGGAACACACACTGAAAAAAAAAAAAAAAAAA

WPI; 2003-875636/81. P-PSDB; ADD78919.

New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for the diagnosis, prevention and/or treatment of tumors, such as lung, colon, breast, prostate, rectal, cervical and/or liver tumors

Claim 2; Fig 375; 637pp; English

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TMF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adremal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, in generating to polymucleotides are useful in molecular biology, in generating the problem of the properties of the properties are useful in the development and screening of he properties are useful in the development and screening of kencapture of the proliferation of colony peptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing of human microvascular endothelial cells, for modulating the uptake of stimulating differentiation of or gene expression in periory cells, for stimulating of ferentiation of inner ear utricular supporting cells or T-lymphocyte cells, for stimulating the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of inner ear utricular such as sports injuries and articular cartilage are useful for treating various mammals and condition. This cells, from chanced local immune system cells of probeglydes are useful for treating various mammals and condition. This sequence encodes a human PRO polypeptide of the invention. Note: The sequence codes a human PRO polypeptide of the invention. The sequence maned or this patent is also escivate an elec

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

CTTCACGGGGCTGGCTGCTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC 240 240 61 AATCTATCAGGAAAGAAAGAAAGAAAAAACCGAACCTGACAAAAAAGAAGAAAAAGAAGAAG AAGAAAAAAATCATGAAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 180 CACCITCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCTCAG 300 GIGCACTATTGACAACCGGGTCACCCGGGTGGCCTAAACCGCAGCACCATCTCTA 360 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 60 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCCTTGCACAAGCTTGAGAGCAACAC 60 CTTCACGGGGCTGGCTCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCACGCGGAGATGC GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA Gaps ô 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; Live 0; Mismatches 0; Indels 0; Query Match Best Local Similarity 100. Matches 1679; Conservative 61 241 121 181 181 241 301 301

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상 원	361	161 TGCTGGGAATGACAGTGCTGCTGGATCCTCGCGTGGTCCTTCTGAGCACACACA
à	421	
ą a	421	GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 480
දු පු	481	GGTGCAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 540
ò	541	=
qq	541	CAAAATHGTAGAGATTTCTTCAGATATCTCCCATTAATGAAGGGAACAATATTAGCCTCAC 600
ò	601	10
qq	601	
ò 5	661	
3 8	721	AGGGAACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCGTGGTACGGAGTAAA 780
. d	721	
ò	781	GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 840
QQ	781	GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 840
<i>ŏ</i>	841	0
Ωp	841	ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 900
ò	901	CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGAAGGGGTGAAAGTGGAAAAAAA
QQ	901	caaggatgacaaaagactgattgaaggaaagaaaggggtgaaagtggaaaacgttt 960
ò	1961	CCTCTCAAAACTCATCTTCTAAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT 1020
qq	961	ccrcrcaaaacrcarcrrcaargrcrcreaacargacrargggaacracacrrgcgr 1020
ò	1021	GGCCTCCAACAAGCTGGGCCACCACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT 1080
Ор	1021	GGCCTCCAACAAGCTGGGCCACAATGCCACCATCATTTGGTCCAGGCGCCGT 1080
٥ý	1081	CAGCGAGGTGAGCAACGGCACGTCGAGGGCAGGCTGCGGTCTGCGCTGCTGCTGCTTCT 1140
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ò	1201	
අු	1201	GCCGCCACCACCACCACACACACCATGGCAACAGCGACAGCAACCAATCAGATA 1260
č	1261	TATACAAATGAAATTAGAAGAAGACACCTCATGGGACAGAAATTTGAGGGAGG
qq	1261	TATACAAATTAGAAGAAACACACCCCCATGGGACAGAAATTTGAGGGAGG
ò	1321	AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA 1380
gg	1321	
ò	1381	
q	1381	INGGTACATGGAGTTTTCTTTTCCCAAACGGGAAGAACACAGGACACCCGGCTTGGA 144

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1560
                                                                                                           1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560
                                                                                                                                                 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTG 1620
                                                                                                                                                                             1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGTGCGGCACTTTG 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; secreted and transmembrane protein; PRO; gene; ss;
Tumour necrosis factor alpha release; TWT-alpha release;
glucose uptake modulator;
cell proliferation stimulator; oell differentiation stimulator;
cell differentiation inhibitor; cytokine release stimulator; tumour;
und tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
cervical tumour; ilver tumour; chromosome mapping; gene mapping;
gene therapy; chromosome identification; chromosome marker.
                                                                                                                                                                                                                       The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FRA by skeletal miscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the release of proteoglycans from cartilage, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the proliferation of C-1 with the release of a cytokine from PBMC cells, for inhibiting the binding of
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                                                                         TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various and/or cartilage disorders, e.g. arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G:
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel human secreted and transmembrane protein PRO337 cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 2; SEQ ID NO 375; 636pp; English.
                                                                                                                                                                                                                                                                                                                                                        ADE32868 standard; cDNA; 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUN-2000; 2000US-0209832P.
01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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                                                                                                                                                                                                                                                                                                                                                                                                                                  29-JAN-2004 (first entry)
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P-PSDB; ADE32869.
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CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonoclectide probes are useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic asent. FNO is useful in assays to identify other proteins or molecules involved in binding in assays to identify other proteins or molecules involved in binding or interaction. A polynucleotide (II) encoding (I) is useful in chromosome come mapphing, in generation of antisense RNA and bNA, in the crockout animals which in turn are useful in the development and considered the interapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating corposes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum, and for a fifnity purification of PRO from recombinant cell culture or natural cources. (II) and (II) are useful for tissue typing. This sequence encodes or a novel human secreted and transmembrane PRO polypeptide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.0
Matches 1679; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
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                                                GGTCACCGGGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG
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AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCCCCGTGGTACGGAGAGTAAA
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ADE42560 standard; cDNA; 1679 (first entry) 29-JAN-2004 ADE42560; RESULT 111 axxxax

Human PRO polymucleotide #188.

Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; inner ear utricular supporting cell; perioyte cell; endothelial cell; tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.

Homo sapiens.

US2003199032-A1.

23-OCT-2003.

28-MAY-2002; 2002US-00156844.

03-MAR-2000; 2000US-0187202P. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

3 Gao Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G: Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-900161/82. P-PSDB; ADE42561.

Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various and/or cartilage disorders, e.g. arthritis.

Claim 2; Fig 375; 636pp; English

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis of polypeptide, a method for stimulating the prosection or differentiation of chondrocyte cells and a method for proliferation or differentiation of chondrocyte cells and a method for or detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses a hybridisation probes, in chromosome and gene mapping, in generating to polymucleotides may also this service. The PRO bolypeptides or antibodies are used in preparing propagation or knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful as tumours, for stimulating and inhibiting proliferation of madicament for treating a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides of stimulating differantiation of adipocyte cells, for stimulating of ferentiation of adipocyte cells, for stimulating differantiation of inner ear utricular such as sports injuries and carthritis. PRO collecation of inner ear utricular such as sports injuries and a articular cartilage are useful for treating various mammalian hammoly condition. The proliferation of some calcular ear utricular such as sports injuries and a articular cartilage are useful for treating various mammalian hammoly condition. The sequence data for this patent is also each the invention. Note: the sequence data for this patent is also each time.

The sequence represents a human PRO polymerical and in electronic form the sequence data for this pate

0 Other; C; 419 G; 330 T; 0 U; BP; 498 A; 432 Sequence 1679

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960 840 960 240 240 300 300 420 480 600 600 9 360 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 180 9 9 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGGGGAGGGCGCCTCTCAG CIGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAAGGGGGTGAAAAGTGGAAAAACAGACCTTT CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTTA GIGCACTATIGACAACCGGGTCACCGGGTGGCCTGGCTAAACCGCAGCACCATCCTTA TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCACACACCCAAAC CAAAATIGIAGAGATITCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGAACAACAATATTAGCCTCAC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGCA AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCGCCCCCCGTGGTACGAGAGTAAA ACAAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGGGGGGGAGAAACAGACCTTT GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC CTTCA CGGGGCTGGCTGTGTGTCTCTTCCAAGGAGTGCCCGTGCGCGAGGAGTGC GITGIGICCTICAGCAAAACAGIGGATITAAATCICCTIGCACAAGCITGAGAGCAAACAC Gaps ö Length 1679; Indels 100.0%; Score 1679; DB 1; 100.0%; Pred. No. 6.7e-05; iive 0; Mismatches 0; Best Local Similarity 100. Matches 1679, Conservative 301 361 241 421 541 601 661 721 781 781 841 901 961 121 181 301 361 421 481 481 541 601 661 721 841 901 61 181 Query Match Best Local 9 8 6 8 6 8 6 8 8 දු දු ઠે d D 8 S ò 셤 र्घ क्ष द 요 유 8 6 8 6 ઠે ď 장 웜 දි සි 8 ò

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standard; cDNA; 1679 ADE17348; ADE17348 RESULT 112 ADE17348

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720 720 780 780 840

Human cDNA encoding secreted/transmembrane protein, PRO337

(first entry)

29-JAN-2004

Human; ss; gene; secreted protein; transmembrane protein; PRO; cytostatic; ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary; auditory; tumour growth; retinal disorder; sports-related joint problem; articular cartilage defects; osteoarthritis; rheumatoid arthritis; wound healing; hearing loss.

Homo

900 900

US2003203433-A1

2001US-00145016 18-OCT-2001; 98US-0084414P. 06-MAY-1998; 22-DEC-1998;

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99WO-US000106.
99WO-US005028.
99US-00284291.
99US-00380138.
2000WO-US004341.
2001US-00918585.
                                         WPI; 2003-875640/81.
P-PSDB; ADE17349.
05-JAN-1999;
08-MAR-1999;
12-APR-1999;
25-AUG-1999;
18-FEB-2000;
30-JUL-2001; 2
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(GETH) GENENTECH INC

61

Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
Kliavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton
Stewart TA, Tumas D, Williams PM, Wood WI;

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New genes, and its encoded secreted and transmembrane polypeptides, useful for treating e.g. lung or breast tumors, osteoarthritis, rheumatoid arthritis, obesity, diabetes, hyperinsulinemia, hypoinsulinemia or wounds.

Claim 2; SEQ ID NO 522; 459pp; English.

61 AATCTATCAGGAAAGAAAGAAAAAAAAAACCGAACCTGACAAAAAAAGAAGAAAAAAGAAGAAG

GITGIGICCTICAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC

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Gaps

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Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

300 300 360 360 420 420 480 480 600 9 999 720 720 780 780 840 900 900 960 GTGCACTATTGACAACCGGGTCACCGGGTGGCCTGGCTAAAACCGCAGCACCATCCTCTA AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCGTGGTACGGAGAGTAAA GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CAAGGATGACAAAAGACTGATTGAAGGAAAGAGAGGGTGAAAGTGGAAAACAGACCTTT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT CTTCACGGGGCTGCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC TGCTGGGAATGACAAGTGGTGCTCGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAAC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA **GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA** CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAAGGGGGTGAAAGTGGAAAACAGACCTTT CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT CAGCGAGGTGAGCAACGGCACGTCGAGGAGGCAGGCTGCGCTGCTGCTGCTCTTCT CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGAGCGCCACCCTCAG CACCTTCCCCAAAGCTATGGACAACGTGACGTCCGGCAGGGGGGGAGAGCGCCACCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC **GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC** GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC Gerecadacadacadecadecadadacereradogrecadererarrordeaagrareree <u>CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC</u> CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC CTTCACGGGGCTGCTCTCTGTGTCTTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC GGTGCAGACAGACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC **AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT** 841 841 901 1021 1021 1081 1081 121 481 541 601 661 721 181 181 241 241 301 301 361 361 421 421 481 541 601 661 721 781 781 901 196 196 121 g ď g g 셤 В g à ద a ò 엄 Š d 셤 g 셤 8 8 ò ò ठ 8 ò ò 8 ठे ે ò ઠે $\dot{\delta}$

17-SEP- 07-OCT- 29-OCT- 20-NOV-	01-DEC- 05-JAN- 08-MAR- 10-MAR- 10-MAR- 20-APR-	14-MAY- 02-JUN- 01-SEP- 08-SEP- 13-SEP- 15-SEP-	29-NOV- 30-NOV- 30-NOV- 01-DEC- 02-DEC-	02-DEC- 16-DEC- 20-DEC- 20-DEC- 22-DEC- 30-DEC- 30-DEC-	06-JAN- 06-JAN- 11-FBB- 11-FBB- 12-FBB- 22-FBB- 24-FBB- 24-FBB- 24-FBB- 01-MAR- 02-MAR- 15-MAR- 15-MAR- 11-AUG- 21-MAR- 21-MAR- 22-MAR- 06-NOV- 01-DEC- 24-AUG- 24-AUG- 25-AUR- 26-AUR- 26-AUR- 27-MAR- 28-PBB- 28-PBB
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TTGCACCTGCT SCCACCACCACC 	TATACAAATGAAATT 	APAGAATACTTTGGGTTTTGGGTTTTTGGTTTTTGGTTTTTTTT	ACTGCAAGCTGG ACTGCAAGCTGG CCCCACAGAGTG GCCCACAGAGTG	CATAGAGACGA 	standard; cDNA; 1679 ding human PRO polypeding base PRO; secrete crows factor-alpha; crowascular endothelluscie cell; adjocy; uuscle cell; adjocy; uuscle cell; adjocy; uuscle cell; adjocy; uuscle cell; adjocy; ad arthritis; haemoglarem cell infiltratifem cell cell cell cell cell cell cell ce
1141 GGTC 1201 GCCC 1201 GCCC	1261 TATA 261 TATA 1321 AAAC	—« H—H	1441 CCC3 1441 CCC3 1501 TCTC 1501 TCTC	<u> </u>	LT 113 D576 ADD80576; 29-JAN-204 (f cDNA encoding h Human; gene; ses tumour necrosis cancer; adrenal liver; microvas skeletal muscle inner ear utric endothelial cel sports injury; rheumatoid arth immune system c Homo sapiens. US2003207418-A1 06-NOV-2003. 07-MAY-2002; 20 31-WAY-1998; 14-UN-1998; 14-SEP-1998;
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17-SEP-1998; 98WO-US019437.
29-OCT-1998; 98WO-US021991.
29-OCT-1998; 98WO-US021991.
29-OCT-1998; 98WO-US022991.
29-OCT-1999; 98WO-US022991.
20-NAN-1999; 98WO-US02190.
8-MAR-1999; 98WO-US00106.
8-MAR-1999; 99WO-US00119.
10-MAR-1999; 99WO-US00119.
10-MAR-1999; 99WO-US00119.
10-MAR-1999; 99WO-US00111.
10-MAR-1999; 99WO-US00111.
10-MAR-1999; 99WO-US00111.
10-MAR-1999; 99WO-US021144.
11-SEP-1999; 99WO-US021144.
11-SEP-2000; 2000WO-US021144.
11-SEP-2000; 2000WO-US001144.
11-AMA-2000; 2000WO-US001170.
11-AMA-2000; 2000WO-US001170.
11-AMA-2000; 2000WO-US001170.
11-AMA-2000; 2000WO-US011170.
11-AMA-2000; 2000WO-US0111744.
11-AMA-2000; 2000WO-US011174.
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25-MAY-2001; 2001US-00866034.
25-MAY-2001; 2001WO-US017092.
01-JUN-2001; 2001WO-US017093.
01-JUN-2001; 2001WO-US017800.
05-JUN-2001; 2001US-00882342.
19-JUN-2001; 2001WS-00886342.
20-JUN-2001; 2001WS-00886342.
22-JUN-2001; 2001WS-US019692.
22-JUN-2001; 2001WS-US021066.
29-JUN-2001; 2001WS-US021066.
09-JUL-2001; 2001WS-US021066.
09-JUL-2001; 2001WS-US021419.
06-AUG-2001; 2001US-00908827.
16-AUG-2001; 2001US-00908827.
16-AUG-2001; 2001US-00908827.
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the prosting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidhey, cervical and a method for proliferation probes, in chromosome and gene mapping, in generating colon, breast, prostate, rectal, kidhey, cervical and liver tumours). The polymucleotides may also hybridisation probes, in chromosome and gene mapping, in generating colon, breast, prospating RN and in gene therapy. The polymucleotides may also a trainesmes RNA and in gene therapy. The polymucleotides may also consecut the PRO polypeptides by recombinant techniques and in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful as tumours, for stimulating and inhibiting proliferation of thuman microvascular endothalal cells, for modulating the uptake of stimulating differentiation of adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating cells or T-lymphocyte cells, for stimulating differentiation of inner ear utricular supporting cells, for stimulating cells or to gene expression in pericyte cells, for stimulating cells or traiting ear useful for treating sports related joint problems, articular cartilage are useful for treating various mammals and condition. This ceptuence date for missed such as various thalassaemias and condition. This ceptuence date for this patent is also exclassed in electronic format from the patent as a human PRO polypeptide of the invention. The patent is also esquence mane of the instruc
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                                                                                          Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gr
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
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(GETH ) GENENTECH INC
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P-PSDB; ADD80577.
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Query Match 100.0%; Score 1679; DB 1; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0;

Length 1679;

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CAGCGAGGTGAGCAACGCCACGTCGAGGAGGGCAGGCTGCGTCTGGCTGCTGCTCTTCT
                             GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT
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01-DEC-2000; 2000WO-US032678.
19-DEC-2001; 2001US-00028072.
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the profiteration or differentiation of chondrocyte cells and a method for confidence and presence of a tumour in a mammal (e.g. adremal, lung, cervical and liver tumours). The proliferation probes, in chromosome and gene mapping, in generating antibenses RNA and BNA and in Decellar biology, including uses as hypridisation probes, in chromosome and gene mapping, in generating antibense probe. The proportion of the properties by recombinant techniques and in the development and screening of herapeutically useful a setul in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of therapeutically useful caregomes, such as tumours, for stimulating and inhibiting proliferation of thuman microvascular endothelial cells, for modulating the uptake of glucose or FFA by skeletal muscle cells of adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating of finer ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cells of adipocyte cells, for stimulating and anthritis. PRO polypeptides which stimulate as sports injuries and articular cartilage are useful for treating various mammalian hasmoglobin-associated disorders such as various thalassaemias and condition. Wote: The sequence are sequence data for this patent is also available in electronic format sequence represente a human PRO polymucleotide of the invention. Note: The sequence represente a human PRO polymucleotide of the invention.
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                                         Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Ga
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
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Best Local Similarity 100.
Matches 1679; Conservative
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P-PSDB; ADD89605.
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                                                                                                                                                                                                                                                                                                            Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tummour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tummour; cancer; adrena!; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; perioyte cell; inner ear utricular supporting cell; T-lymphocyte cell; sports injury; proteoglycan; articular cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO
                                                                                                      CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCCAGTGTGGGCAAGGCCTCAGCCTC
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                                     Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various and/or cartilage disorders, e.g. arthritis.
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Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
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01-DEC-2000; 2000WO-US03267B.
19-DEC-2001; 2001US-00028072.
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polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the problemation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hybridistion probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polymucleotides may also antisense RNA and DNA and in gene therapy. The polymucleotides may also consistent that the development and screening of therapeutically useful cragent in the development and screening of therapeutically useful cragents. The RNO polympeptides or antibodies are used in preparing a condition responsive to the polympeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of antibodies or adipocyte cells, for antibodies, such as tumours, for stimulating and inhibiting proliferation of conversely and elected of adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating configuration of or gene expression in paricyte cells, for stimulating configuration of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cells to may propries and/or cartilage disorders such as sports injuries and conditions which articular cartilage defects, offermation and for treating cartivities and conditions which articular cartilage defects, offerwarding sports-related joint problems, articular cartilage defects, offerwarding various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanned for this patent is also evaliable in electronic format cortinal cartilage defects, offerwarding cell informer cell in the may benefit from enhance data for this patent is also evaliable in electronic format cortinal cortinal and condition with a sequence cortinal cortinal cortin

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1200 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGCTCAGCTC 1500 1080 1080 1260 1020 600 999 999 720 720 780 780 840 840 900 900 960 1201 GCGCCACCACCACCACCAACACACAACAGCAATGGCAACACCGACAGCAACCAATCAGATA AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCCAAGCGTGGCGCTGCGGGCACTTTG GTCCATAGAGACGAACAGAATGAGACTTCCGGCCCAAGCGTGGCGCTGCGGCACTTTG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 841 ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 1081 CAGCGAGGTGACCAACGCCACGTCGAGGAGGGCAGGCTGCCTCTGGCTCTGGCTGCCTCTTCT AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA CAAAATTGTAGAATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC GGTCACCGTGAACTATCCACATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 781 Gercaccergaacrarccaccaracarricagaagccaagggracaggrerccccargg 961 CCTCTCAAAACTCATCTTCTCAATGTCTCTGAACATGACTTAGGGAACTAGACATGCGT 1021 GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT GCCGCCACCACCACCACCAACACAGCAATGGCAACACCGACAGCAACCAATCAGATA CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACACATCTCTCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGGTGAAAGTGGAAAACAGACCTTT CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT CAGCGAGTGAGCAACGCCACGTCGAGGAGGGGCAGGCTGCGTCTGGCT 1441 1201 1261 1321 1381 1441 1501 1501 1561 1621 901 1081 1141 1261 1321 1381 1561 841 961 541 601 661 661 721 781 601 8 6 8 6 B 6 g 8 8 중염 8 8 8 ઠે ద d ò g ò ď 엄 ઠે 유 ò ò

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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNP-alpha) from human blood, a method for stimulating the release to the stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polymucleotides may also antisense RNA and DNA poptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful consecution in the development and screening of therapeutically useful continuous such as tumours, for stimulating and inhibiting proliferation of conforman microvascular endotherlal cells, for medialement for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation stimulating differentiation of adipocyte cells, for stimulating stimulating differentiation of adipocyte cells, for stimulating proliferation of proliferation in pericyte cells, for stimulating
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Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFB; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage dect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder; rhalassaemia; immune system cell infiltration.
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19-DEC-2001; 2001US-00028072.
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the proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobinassociated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polymucleotide of the invention. Once: The sequence data for this patent is also available in electronic format from USPTO at seqdata.uspto.gov/sequence.html.
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Best Local Similarity 100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;
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standard; cDNA; 1679 ADC48828

ADC48828

(first entry) 15-JAN-2004

Novel human secreted and transmembrane protein PRO337 cDNA

human; secreted and transmembrane protein; PRO; gene; ss; cytostatic; vulnerary; antiarthritic; perioyte cell proliferation; perioyte cell differentiation; chondrocyte cell proliferation; chondrocyte cell differentiation; tumour necrosis factor alpha release; chondrocyte cell differentiation; tumour necrosis factor alpha release;

tumour; (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour; lung colon tumour; breast tumour; prostate tumour; rectal tumour; liver tumour; tissue typing; chromosome mapping; gene mapping; gene therapy.

Homo sapiens

US2003092888-A1.

15-MAY-2003.

13-AUG-2002; 2002US-00219468

01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480.

(GETH) GENENTECH INC.

Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood Desnoyers L, I, Gurney AL, Baker KP, De Grimaldi JC,

WPI; 2004-031186/03. P-PSDB; ADC48829.

Novel isolated PRO polypeptide useful for tissue typing, gene therapy, molecular weight markers in protein electrophoresis, for treating arthritis, tumor.

Claim 2; SEQ ID NO 125; 308pp; English.

The invention describes an isolated PRO (secreted and transmembrane)

polypeptide (I). PRO982. PRO1160. PRO1187 or PRO1329 polypeptide are

polypeptide (I). PRO982. PRO1160. PRO1187 or PRO1329 polypeptide are

consideration for stimulating the proliferation of condrocyce are

periotyce cells. PRO357, PRO325. PRO1272 or PRO4405 polypeptide are useful

consideration and manna blood. PRO982. PRO1275. PRO1419. PRO1419.

RRO147. PRO337, PRO357. PRO155. PRO1306 or PRO1419 polypeptide

are useful for stimulating the release of tumour necrosis factor (TNF)
alpha from human blood. PRO982. PRO331, PRO1083. PRO1419. PRO1419.

RRO147. PRO337, PRO356. PRO3157, PRO1275. PRO1306, PRO1419.

PRO147. PRO337, PRO356. PRO186. PRO1197. PRO1244, PRO1419.

RRO125. PRO1181. PRO1186. PRO1186. PRO1197. PRO1244, PRO1314.

RRO125. PRO1181. PRO1186. PRO1186. PRO1197. PRO1244, PRO1314.

RRO125. PRO1330. PRO9181 or PRO11065 pro19peptide are useful for

consideration the proliferation of normal human dermal fibroblast cells.

CONTROL PRO125. PRO186. PRO1184. PRO1184. PRO1312.

CONTROL PRO125. PRO186. PRO1184. PRO1187. PRO1366.

RRO126. PRO127. PRO5187. PRO1186. PRO1187. PRO1186.

RRO1286. PRO1187. PRO1186. PRO1186. PRO1187. PRO1186.

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Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

Gaps Query Match
100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;

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1081 CAGCGAGGTGAGCAACGGCACGTCGAGGAGCTGCGCTCTGCTCTCTTTTT 1140	RESULT 118 ADC81112 ADC81112 XX XX XX AC ADC81112; XX AC ADC81112; XX
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01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WFI; 2004-020238/02. P-PSDB; ADC81113.

New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or cancer.

Claim 2; Fig 375; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO invention also relates to an antibody which specifically binds to a PRO inchange of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a memmal (e.g. adremal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as thy including uses as the polynucleotides may also attiense RNA and BNA and in gene therapy. The polynucleotides may also attiense RNA and BNA and in gene therapy. The polynucleotides may also be used in preparing PRO polypeptides or knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating of inhibiting proliferation of stimulating and inhibiting proliferation of secondary and inhibiting proliferation of secondary and inhibiting proliferation of secondary and inhibiting and the proliferation of secondary and architis. PRO polypeptides which stimulate the release of stimulating various bone and/or cartilage defects, osteoarthritis and rheumatoid cartilage are also useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid cartilage are also useful for treating sports infilteration. This sequence expression to which may benefit from enhanced local immune system cell invention. Note: The sequence dara for this patent is also available in the invention which may benefit drom enhan

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

120 120 180 180 240 9 9 CTTCACGGGGCTGCTCTGTGTCTCTTCCAAGGGTGCCCGTGCCGGGCGGAGATGC GTTGTGTCCTTCAGCAAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGAACAC GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC Gaps · 0 Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0; 181 g Š Q Q ò ઠ 셤

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1020 1080 1080 1140 840 900 900 960 960 360 360 420 420 480 480 540 540 600 600 099 999 720 720 780 780 840 300 961 CCTCTCAAAACTCATCTTCTAATGTCTCTGAACATGACTATGGGAACTACACATGCGT 781 GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 841 ACAAAAGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACGCTTGCGT 1021 GGCCTCCAACAAGCTGGGCCACACAACAGCCAGACATCATGTTGTTTGGTCCAGGGGCGT CAGCGAGGTGAGCAACGCACGTCGAGGAGGCAGGCTGCGCTCTGCTGCTCTTCT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCGGGGAAGGCT GCCGCCACCACCACCAACACACAACAGCAATGGCAACACCGACAGCAACCAATCAGATA GCCGCCACCACCACCAACACACAGCAATGGCAACACCGACAGCAACCAATCAGATA GCAGTACAGCATCGAGAACGTGGATGATATGACGAGGGCCCTTACACTCGCTC 481 GGTGCAGACAGCACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCCATTAATGAAGGGAACAATATTAGCCTCAC AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCCGTGGTACGAGAGTAAA CAAGGATGACAAAAGACTGATTGAAGGAAAAGAGGGGTGAAAGTGGAAAACAGACTTT CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGAAAGGGGTGAAAGTGGAAAACAGACCTTT GGCCTCCAACAAGCTGGGCCACAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT CTTCACGGGGCTGCTGTGTCTCTTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCCTCAG TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC GGTGCAGACAGCCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 781 GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 1141 901 1081 1081 1141 1201 1201 1261 901 1021 421 721 841 961 241 301 301 361 481 541 601 661 8 6 8 8 8 8 ద 8 8 8 g g 8 8 8 8 8 a a 8 8 8 8 8 δ g ઠે g ò 쉽 à g à ò 셤 ઠે

1620 1560 1440 1440 1500 1560 GTCCATAGAGACGAACAGAACCTTCCGGCCCCAAGCGTGGCGTGCGGGCACTTTG 1620 GTAGACTGTGCCACCACGGCGTGTGTGAAACGTGAATAAAAAGGGCAAAAAAA 1679 Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI; release Human; secreted and transmembrane protein; PRO; gene; ss; cytostatic; vulnerary; antiarthritic; pericyte cell proliferation; pericyte cell differentiation; chondrocyte cell proliferation; chondrocyte cell differentiation; tumour necrosis factor alpha release (TMF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; liver tumour; tissue typing; chromosome mapping; gene mapping; TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGGTGGCCATCCCAAATTCAATGA 1321 AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACACCACACCCCGGCTTGGA CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCCAAAGGCTCAGCCTC TCTGCCCACAGAGTGCCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA Novel human secreted and transmembrane protein PRO337 cDNA ADE20999 standard; cDNA; 1679 BP 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480. 28-AUG-2002; 2002US-00230433 (first entry) Baker KP, Desnoyers L, Grimaldi JC, Gurney AL, (GETH) GENENTECH INC JS2003100735-A1. Homo sapiens 29-JAN-2004 29-MAY-2003. 1441 1501 1561 1561 1621 1621 1441 1501 1321 1381 ADE20999 RESULT 11
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polypeptide (I). PR0982, PR01160, PR01187 or PR01329 polypeptide are useful for stimulating the proliferation of or gene expression in percyte cells. PR0357, PR0229, PR01272 or PR04405 polypeptide are useful for stimulating the proliferation or differentiation of chondrocyte cells. PR0351, PR0725, PR01315, PR013106 or PR04149 polypeptide are useful for stimulating the pr09155, PR01315, PR013106, PR01419, PR01419, PR09140, PR09141, PR09141, PR09141, PR091414, PR091414, PR091414, PR091414, PR091414, PR091414, PR01306, PR0 120 120 180 240 240 300 300 360 360 420 420 480 480 60 9 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCACACACCCAAAC 1 GITGIGITECTICAGCAAAACAGIGGAITITAAAICICCTIGCACAAGCITGAGAAAACA 1 GITGIGCCTTCAGCAAAACAGTGGAITTAAATCTCCCTTGCACAAGCTTGAGAGCAACAC ATICTATCAGGAAAGAAAGAAAAAAACCGAACCTGACAAAAAAGAAGAAAAGAAG AAGAAAAAATCCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT CTTCACGGGGCTGCTGTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCTCAG GIGCACTATIGACAACCGGGICACCCGGGIGGCCIGGCIAAACCGCAGCACCAICCTCIA ö Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; PRO polypeptide. 301 61 121 181 181 241 241 301 361 361 421 61 421 à 셤 8 셤 ઠે g ò ઠ 엄 ઠ g 8 g <u>ک</u> م

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New PRO polypeptides and nucleic acids encoding the polypeptides, in gene therapy, chromosome identification, tissue typing, or as hybridization probes in chromosome and gene mapping.

WPI; 2004-008985/01. P-PSDB; ADE21000.

(secreted and transmembrane)

The invention describes an isolated PRO

Claim 2; Fig 125; 308pp;

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The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polymucleotides encoding them.

Cr The PRO polypeptides and polymucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for detecting tumours (e.g. lung tumour, colon tumour, breast tumour, colon tumour, breast tumour, prostate tumour, rectal tumour or liver tumour) in a mammal, for stimulating the relase of tumour necrosis factor (TNF) alpha from human colon, for stimulating the proliferation of chondrocyte cells, for stimulating the proliferation of chondrocyte cells, for stimulating the proliferation of chondrocyte cells, for stimulating the proliferation of choracion probes, in chromosome and gene mapping, in generating contisions may be used in the development and screening of therapeutically useful creageness and in generating probes. The PRO polypeptides by recombinant creagents, in gene therapy, in chromosome identification, as chromosome condition which is responsive to the PRO polypeptides, or anti-PRO condition which is responsive to the PRO polypeptides, or anti-PRO condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and bone and/or cartiage discrete (e.g. arthritis, sports injuries), involving inducing the recombination of chondrocytes. The PRO polypeptides are useful as
1561 GTCCATAGAGAGAGAAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTG 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New secreted and transmembrane PRO polypeptides and nucleic acids, useful in gene therapy, or for preparing a medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephen JF, Watanabe CK, Wood WI;
                                                                                                                                                                                                                                                                                              Human, PRO; gene, 88; secreted polypeptide; transmembrane polypeptide; tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TNP-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic.
                                                                     GTAGACTGTGCCACCACGGCGTGTGTTGTGAAAGGTGAAATAAAAGAGGAAAAAAA
                                                    Claim 2; Fig 125; 308pp; English.
                                                                                                                                                                     ADE05843 standard; cDNA; 1679
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29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
                                                                                                                                                                                                                                                                    Human PRO polynucleotide #63.
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                                                                                                                                                                                                                                   29-JAN-2004 (first entry)
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Grimaldi JC, Gurney AL,
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P-PSDB; ADE05844.
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molecular markers for protein electrophoresis, and in tissue typing. This correct sequence represents a human PRO polymucleotide of the invention. XX Sequence 1679 BP; 438 A; 432 C; 419 G; 330 T; 0 U; 0 other; Duery Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0; Gaps 0; 1 GTYGTGTCTTGAGGAAACAGGGGATTTAAATCTCTTGCACAACAGGAGACAC 60	Qy 541 CAAAATTGTAGGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 600 bb 601 CAGAATTGTAGGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 600 Qy 601 CTGCATAGCAACTGGATACTTCCATTAATGAAGGGAACAATATTAGCCTCAC 600 Db 601 CTGCATAGCAACTGGAACACTGCGCTACTTGGAACACTCTCTCCCAAAGC 660 Qy 661 GGTTGGCTTTGTGAACAGGACTACTTGGAAATTCAGGACACTCTCTCCCAAAGC 660 Qy 661 GGTTGGCTTTGTGAACAGGACTACTTGGAAATTCAGGACATCTCTCCCCAAAGC 660 Qy 661 GGTTGGCTTTGTGAAGACGAATACTTGGAAATTCAGGACATCTCTCCCCAAAGC 660 Qy 721 AGGGGACTTAGTGAGTGACTGCCCCCAATGACTGGACGCCCCCGCGGCACCCCCCGGGAGAATAA 780 Qy 781 GGTCACCGTGAGGTGCCTCCCAATGACTGGCCGCCCCGTGGTACAGGAGTAAA 780 Qy 781 GGTCACCGTGAACTTCCACCATACATTCAGAAGCCAACGGAGAGTAAA 780 Qy 781 GGTCACCGTGAACTATCCACCATACATTCAGAAGCCAACGAGAATTCCAGTGGTA 900 Qy 841 ACAAAAAGGGAACACTGCAGTGTGAAGCCTCAGCAGCACCCTCAGCAGAATTCCAGTGGTA 900 Qy 901 CAAGGACCACTGCAGTGTGAAGCCTCAGCAGCACCCTCAGCAGAATTCCAGTGGTA 900 Qy 901 CAAGGACACACACACACACTCAGCAGCCCCCTCAGCAGAATTCCAGTGGTA 900 Qy 901 CAAGGACACACACACACACTACACACACACACACACACAC

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16-APR-2002; 2002US-00123912
29-MAY-2003
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31-WAR-1997, 97W0-US005230.

12-JUN-1998, 98W0-US012456.

14-SEP-1998, 98W0-US012456.

14-SEP-1998, 98W0-US012824.

14-SEP-1998, 98W0-US018024.

14-SEP-1998, 98W0-US019094.

14-SEP-1998, 98W0-US019094.

14-SEP-1998, 98W0-US019094.

15-SEP-1998, 98W0-US01913.0.

17-SEP-1998, 98W0-US01913.0.

17-SEP-1998, 98W0-US01913.0.

17-SEP-1998, 98W0-US01913.0.

18-SEP-1999, 98W0-US02181.0.

29-OCT-1998, 98W0-US02181.0.

20-NOV-1999, 98W0-US02181.0.

20-APR-1999, 99W0-US02181.0.

20-APR-2000, 2000W0-US02181.0.

20-BEC-1999, 99W0-US02181.0.

20-BEC-1999, 99W0-US03181.0.

20-BEC-1999,

01-DEC-2000; 2000WO-US032678.
20-DEC-2000; 2000WO-US034596.
20-PEC-2000; 2000WO-US034596.
28-FEB-2001; 2001WO-US034596.
29-FEB-2001; 2001WO-US006520.
10-MAR-2001; 2001WS-00802666.
99-MAR-2001; 2001WS-00802706.
10-MAY-2001; 2001WS-00814280.
10-MAY-2001; 2001WS-00814280.
10-MAY-2001; 2001WS-00814280.
10-MAY-2001; 2001WS-00814280.
11-MAY-2001; 2001WS-00814280.
11-MAY-2001; 2001WS-00814280.
12-MAY-2001; 2001WS-00814280.
13-MAY-2001; 2001WS-00814280.
14-MAY-2001; 2001WS-00814280.
15-MAY-2001; 2001WS-00814280.
16-MAY-2001; 2001WS-00814280.
16-JUN-2001; 2001WS-00814280.
19-JUN-2001; 2001WS-0081413.
22-JUN-2001; 2001WS-00818279.
22-JUN-2001; 2001WS-0081879.
22-JUN-2001; 2001WS-00818173.
18-JUL-2001; 2001WS-00908173.
18-JUL-2001; 2001WS-00908173.
16-JUL-2001; 2001WS-00908173.
16-JUL-2001; 2001WS-00908173.

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G? Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

3

WPI; 2004-008956/01. P-PSDB; ADD76561.

New PRO nucleic acid, useful for recombinantly producing a PRO polypeptide and for manufacturing a medicament for diagnosing or treating a tunor.

Claim 2; Fig 375; 638pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The timentain also relates to an antibody which specifically binds to a PRO polypeptide, a method for timulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the release to an antibody a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hybridiation probes, in chromosome and gene mapping, in generating antisense RNA and DNA and in gene therapy. The polymucleotides may also contisense RNA and DNA and in gene therapy. The polymucleotides may also antisense RNA and DNA and in gene therapy. The polymucleotides may also constain the development and screening of therapeutically useful to research the transgenic animals or knock-out animals which are creagents. The ROD polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating and inhibiting proliferation of of medicament cells or adipocyte cells, for stimulating conflictation of inner eapters or adipocyte cells, for stimulating the uptake of stimulating underlial cells or adipocyte cells, for stimulating cells or of inducing endothelial cells to adipocyte cells, for stimulating cells, for inducing endothelial cell tube formation and for treating cells or arthrities and certaining endothelial cell tube formation and certaining and certaining and cells or adipocyte cells, for inducing endothelial cell tube formation of cells, cel

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articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polymucleotide of the invention. Note: The sequence data for this patent is also available in electronic format from USPIO at seqdata.uspto.gov/sequence.html.
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Matches 1679; Conservative 0; Mismatches 0; Indels 0;
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1440 1500 1320 1380 1380 1080 1140 1200 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCCAAGCGTGGCGCTGCGGGCACTTTG 1620 1020 1140 960 Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide; tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TNP-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic. CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCTTC TCTGCCCCCCACAGAGTGCCCCCCACGTGGAACATTCTGGAGCTGGCCATCCAAATTCAATCA GGICTIGCACCIGCTICTCAAATTTIGATGICAGTGCCACTTCCCCACCCGGGAAAGGCT GCCGCCACCACCACCAACACACACAATGGCAACACCGACAGCAACCAATCAGATA TITAGGIACAATGGAGITITICTITICCCAAACGGGAAGAACACACACACCCCGGCTIGGA CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGGGGCAAGGGCTCAGCCTC AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAAGAAATTGAAAATTGCCTTGCAGATA CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACGGT GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT CAGCGAGGTGAGCAACGGACGTCGAGGAGGCAGGCTGCGTCTGGCTGCTGCTCTTCT CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGGGGAAAAGTGGAAAACAGACCTTT ВР ADD75072 standard; cDNA; 1679 Human PRO polynucleotide #63. entry) (first US2003100712-A1 RESULT 11
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01-JUN-2001; 2001WO-US017800.
29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
         09-AUG-2002; 2002US-00216168.
                            (GETH ) GENENTECH INC.
                                            WPI; 2004-008962/01.
P-PSDB; ADD75073.
                                      Grimaldi JC,
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Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI;

Desnoyers L,

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transmembrane polypeptides) and the PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polypeptides encoding them.

The PRO polypeptides and polymucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for detecting tumours (e.g. lung tumour colon tumour, breast tumour, rectal tumour or liver tumour) in a mammal, for simulating the release of tumour necrosis factor (TMF) alpha from human blood, for stimulating the proliferation of or gene conditoryte cells, for stimulating the proliferation of or gene expression in perioyte cells or for stimulating the proliferation of or gene expression in perioyte cells or for stimulating the proliferation of or gene expression in periosy. In chromosome and gene mapping, in generating antisense RNA and DNA, in preparing PRO polypeptides by recombinant cells and probes, in chromosome and gene mapping, in generating cantisense RNA and DNA, in preparing PRO polypeptides by recombinant cells and beed in the development and screening of therapeutically useful creagents, in gene therapy, in chromosome identification, as chromosome markers and in generating probes. The PRO polypeptides or anti-PRO markers and in generating probes. The PRO polypeptides or anti-PRO condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as perioyte-associated tumours and bone and/or cartial generatiation of chondrocytes. The PRO polypeptides are useful as molecular markers for protein electrophoresis, and in tissue typing. This sequence cartes and an electrophoresis, and in tissue typing. The sequence data for this patent can also be obtained in electronic format directly from USPTO at seqdata.uspto.goc/sequence.html. preparing the PRO New secreted and transmembrane PRO polypeptide useful for medicament for treating a condition that is responsive to polypeptide or anti-PRO antibody, e.g. cancer. Claim 2; Fig 125; 308pp; English. medicament

120 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT 180 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT 180 240 9 1 errererecerreaceaaaacaerecarriraaarerecerrecacaaceaeaecaacaa 1 GITGIGICCTICAGCAAAACAGIGGATTTAAAICTCCTIGCACAAGGTTGAAGAGCAACAC CTTCACGGGGCTGCTGTGTGTCTTCCCAAGGAGTGCCCGTGCGCAGCGGAGATGC °, Query Match
100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; 61 61 121 121 181 Query Match 181

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                                                                                                                                                                                                                                                                                        human; secreted and transmembrane protein; PRO; gene; ss; cytostatic; vulnerary; antiarthritic; pericyte cell proliferation; pericyte cell differentiation; chondrocyte cell differentiation; tumour necrosis factor alpha release; (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; liver tumour; tissue typing; chromosome mapping; gene mapping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Goddard A, Godowski PJ;
han JF, Watanabe CK, Wood WI;
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Smith V, Stephan JF,
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Grimaldi JC, Gurney
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cc for stimulating the proliferation or differentiation of chondrocyte cells. PRO231, PRO357, PRO725, PRO1106 or PRO1419 polypeptide are useful for stimulating the release of tumour necrosis factor (TMF)- alpha from human blood. PRO362, PRO357, PRO125, PRO1106, PRO1419, PRO214, PRO247, PRO337, PRO3626, PRO363, PRO6195, PRO1010, PRO1010, PRO1010, PRO1010, PRO1010, PRO1010, PRO1010, PRO1134, PRO1134, PRO1136, PRO1136, PRO1136, PRO1136, PRO1136, PRO1136, PRO1136, PRO1136, PRO1376, PRO13776, PRO1376, PRO1376, PRO1376, PRO13776, PRO1376, PRO1376, PRO1376, PRO13776, PRO1376, PRO
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100.0%; Pred. No. 6.7e-05;
cive 0; Mismatches 0;
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Best Local Similarity 100.
Matches 1679; Conservative
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The invention describes an isolated PRO (secreted and transmembrane)

CC polypeptide (I). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are

cuseful for stimulating the proliferation of or gene expression in

CC cells. PRO357, PRO329, PRO1272 or PRO4405 polypeptide are useful

cells. PRO351, PRO357, PRO325, PRO1155, PRO1366 or PRO4419 polypeptide

CC are useful for stimulating the release of tumour necrosis factor (INF)-

alpha from human blood. PRO982, PRO357, PRO136, PRO1419, PRO1419,

CC PRO134, PRO137, PRO365, PRO105, PRO1083, PRO144, PRO1419, PRO1309,

CC PRO134, PRO134, PRO136, PRO1805, PRO1444, PRO1411, PRO1309,

CC PRO134, PRO136, PRO186, PRO1806, PRO1444, PRO1444, PRO1309,

CC PRO134, PRO136, PRO1806, PRO1009, PRO1474, PRO1911, PRO1309,

CC PRO1376, PRO1376, PRO1409, PRO1474, PRO1911, PRO1309,

CC PRO1376, PRO1384, PRO1409, PRO1474, PRO1916, PRO1567,

CC STIMULATING THE PRO1164, OF PRO10096 polypeptide are useful for

CC STIMULATING THE PRO1164 or PRO1425 polypeptide are useful for

CC CONTROL OF PRO5725, PRO1154, OF PRO1425, PRO1448, PRO4322,

CC CONTROL OF PRO5725, PRO1154, OF PRO1425, PRO1144, PRO5733, PRO1561,

CC CONTROL OF PRO5725, PRO7154, OF PRO1724, PRO1734, PRO5733, PRO5723, PRO5723, PRO5723, PRO1560, PRO5723, PRO5723, PRO5723, PRO1560, PRO5723, PRO1560, PRO5723, PRO1560, PRO5723, PRO1560, PRO5723, PRO5723, PRO1448, PRO57738, PRO5723, PRO5723, PRO1448, PRO57778, PRO5723, P
human, secreted and transmembrane protein, PRO, gene; ss; cytostatic; vulnerary, antiarthritic; pericyte cell proliferation; pericyte cell proliferation; chondrocyte cell proliferation; chondrocyte cell proliferation; chondrocyte cell proliferation; (TNF)-alpha release; dermal fibroblast cell broliferation; dermal fibroblast cell differantiation inhibitor; tumnour; lung tumnour; colon tumnour; breast tumnour; proteste tumnour; rectal tumnour; lissue typing; chromosome mapping; gene mapping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephen JF, Watanabe CK, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New secreted and transmembrane PRO polypeptide useful for preparing a medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                   Novel human secreted and transmembrane protein PRO337 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               claim 2; SEQ ID NO 125; 308pp; English.
                                                                                                                                                                                ADD85050 standard; cDNA; 1679 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JJN-2001; 2001WO-US017800.
29-JJN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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                                                                                                                                                                                                                                                                                  29-JAN-2004 (first entry)
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Grimaldi JC, Gurney AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GETH ) GENENTECH INC.
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P-PSDB; ADD85051.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene therapy.
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in a test sample of cells taken from the mammal, and a control sample of normal cells of the same cell type, where a higher level of expression the PRO polypeptides in the test sample as compared to the control sample is indicative of the presence of tumour in the mammal. The tumour is ampliant rumour, colon tumour, breast tumour, prostate tumour, rectal tumour or liver tumour. (I) is useful as molecular weight markers, for tissue typing, or as therapeutic agents. A polymucleotide (II) encoding (I) is useful for chromosome and gene mapping or gene therapy. (II) is useful for generating transgenic animals or knock-out animals which are useful screening useful reagents. PRO357, PRO229, PRO1272 or PRO4405 polypeptic is useful for treating bone and/or cartilage disorders (e.g., arthritis sport injuries). This sequence encodes a human secreted and transmembran PRO polypeptide.	st Local Similarity 100.0%; Score 1679; DB 1; Length 1679; conservative 100.0%; Pred. No. 6.7e-05; Indels 0; Gaps 1679; Conservative 0; Mismatches 0; Indels 0; Gaps 1679; Conservative 0; Mismatches 0; Indels 0; Gaps 1 GTTGTGTCCTTCAGCAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACC 6 1 AATCTATCAGGAAAAAAAAAAAAAAAAAAAAAAAAAAAA	541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 6 541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 6 541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAGAGACAATATTAGCCTCAC 6 601 CTGCATAGCACTGGTAGACCCAGAGCCTACGGTTACTTGGAGCACATCTCTCCCCAAAGC 6 661 GGTTGGCTTTGTGAGACCAGAGCCTACGGTTACTTGGAGACACTTCTCCCAAAGC 6 661 GGTTGGCTTTGTGAGACGAATACTTGGAATTCAGGGCACATCACCCGGAGAGTC 7 721 AGGGGACTACGAGTGCAGTGCCTCCAATGACTGGACGCCCCGTGGTACGGAGAGTAA 7 721 AGGGGACTACGAGTGCCTCCAATGACGGCCGCCCCGTGGTACGGAGAGTAA 7 721 AGGGGACTACGAGTGCCTCCAATGACGTGGCCGCCCCGTGGTACGGAGAGTAAA 7 721 AGGGGACTACGAGTGCCTCCAATGACGTGGCCGCCCCGTGGTACGGAGAGTAAA 7 721 AGGGGACTACCAGTGCCTCCAATGACGTGGCCGCCCCGTGGTACGGAGAGTAAA 7 721 AGGGGACTACCAGTGCCTCCAATGACGTGGCCCCGTGGTACGGAGAGTAAA 7 721 AGGGGACTACCAGTGCCTCCAATGACGTGGCCCCGTGGTACGGAGAGTAAA 7 721 AGGGGACTACCAGTACATTACAAAGCCCAGTGGTACGGAGAGTAAA 7 721 AGGGGACTACCACTACATTACAAAGCCCAGTGGTACGGAGAGTAAA 7 721 AGGGGACTACCCCTATGACATTACAAAGCCCAGTGGTACGGAGAGTAAA 7 721 AGGGGACTACCCCTATACATTACAAAGCCCAGTGGTACGGAGAGTAAA 7 721 AGGGGACTACCCCTATACATTACAAAGCCCAGTGGTACGGAGAGTAAA 7 721 AGGGGACTACCCCTATACATTACAAAGCCCAGTGGTACCGGTGGTACCCGTGGTAAA 7 721 AGGGGACTACCCCTATACATTACAAAAGCCCAGTGGTACCCGTGGTAAA 7 721 AGGGGACTACCCATACATTACAAAAGCCAGCCCCCGTGGTACCGCAGAGTAAA 7 721 AGGGGACTACCCCTATACATTACAAAAGCCCCCGTGGTACCGCCCCGTGGTAAA 7 721 AGGGGACTACCCCCATACATTACAAAAGCCCCCCTGGTACCCCCTGGTAAAA 7 721 AGGGGACTACCCCCTATACCCCATACAAAGCCCCCCCTGGTAAAAAAAA
in a test sample of cells taken from the mammal, and a control sample of normal cells of the same cell type, where a higher level of expression of the PRO polypeptides in the test sample as compared to the control sample is indicative of the presence of tumour in the mammal. The tumour is lung tumour, colon tumour, breast tumour, prostate tumour, rectal tumour or liver tumour. (1) is useful as molecular weight markers, for tissue typing, or as therapeutic agents. A polymucleotide (II) encoding (I) is useful for chromosome and gene mapping or gene therapy. (II) is useful for generating transgenic animals or knock-out animals which are useful screening useful reagents. PRO357, PRO259, PRO1272 or PRO4405 polypeptide is useful for treating bone and/or cartilage disorders (e.g., arthritis, sport injuries). This sequence encodes a human secreted and transmembrane PRO polypeptide.	ry Match t Local Similarity 100.0%; Pred. No. 6.7e-05; ches 1679; Conservative 0; Mismatches 0; Indels 0; Gaps 0 1 GTTGTGTCTTCAGGAAAACAGGATTAAATCTCTTGCACAAGCTTGAGAGCAACAC 6 GTTGTGTCTTCAGGAAAACAGAAAAAAACCGAACTGACAAAAAAAA	1 CAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 60 1 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 60 2 CTGCATAGCAACTGGTAGACCAGAGCCTACGTTACTTGAAGAACAATATTAGCCTCAC 60 2 CTGCATAGCAACTGGTAGACCAGAGCCTACTTGTAGAACAATCTTCCCCAAAGC 66 2 CTGCATAGCAATGCTGAAGACCAATACTTGGAAATACTTGGAGCAACATCTCCCCAAAGC 66 4 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGT 72 6 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGT 72 6 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGT 72 7 AGGGGACTACGAGTGCAATGACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 72 8 AGGGGACTACGAGTGCAATGACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 72 8 AGGGGACTACGAGTGCAATGACTTGGAAATTCAGGGCATCACCCGGGAGCAGTAAA 78 7 AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCGCG

chondrocyte cell differentiation, tumour necrosis factor alpha release, (TNF)-alpha release, dermal fibroblast cell proliferation, dermal fibroblast cell differentiation inhibitor; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; lissue typing; chromosome mapping; gene mapping; gene therapy

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Mismatches

Homo sapiens

US2003100738-A1

29-MAY-2003

29-AUG-2002; 2002US-00232222

15-SEP-2000; 2000US-0232887P. 01-JUN-2001; 2001MO-US017800. 29-JUN-2001; 2001MO-US021066. 09-APR-2002; 2002US-00119480.

(GETH) GENENTECH INC

Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI; Desnoyers L, C, Gurney AL, Baker KP, De Grimaldi JC,

WPI; 2004-008988/01. P-PSDB; ADD86877.

New PRO polypeptides and nucleic acids encoding the polypeptides, useful in gene therapy, chromosome identification, tissue typing, or as hybridization probes in chromosome and gene mapping.

Claim 2; SEQ ID NO 125; 308pp; English

The invention describes an isolated PRO (secreted and transmembrane)

C polypeptide (1). PRO582, PRO1160, PRO1187 or PRO1329 polypeptide are
c useful for stimulating the proliferation of or gene expression in

CC periotre cells. PRO357, PRO229, PRO1222 or PRO4405 polypeptide are useful

CC calls. PRO311, PRO357, PRO125, PRO1106 or PRO1419 polypeptide

C calls. PRO311, PRO357, PRO1155, PRO1106, PRO1419 polypeptide

C calls. PRO131, PRO357, PRO1357, PRO1316, PRO1419, PRO1416,

Alpha from human blood. PRO922, PRO10106, PRO1419, PRO1419,

C PRO125, PRO1181, PRO1126, PRO1186, PRO1191, PRO1191, PRO1191,

C PRO125, PRO1181, PRO1126, PRO1109, PRO1191, PRO1191, PRO1191,

C PRO1343, PRO1376, PRO1186, PRO1192, PRO1274, PRO1191, PRO1191,

C PRO1343, PRO136, PRO1186, PRO1191, PRO11924, PRO1341, PRO1191,

CC PRO1381, PRO136, PRO1186, PRO1191, PRO1191, PRO1191,

CC PRO1381, PRO136, PRO1186, PRO1191, PRO1191, PRO1191,

CC PRO1381, PRO136, PRO1186, PRO1191, PRO1191, PRO1191,

CC PRO1381, PRO136, PRO1186, PRO1194, PRO1191, PRO1191,

CC PRO1381, PRO136, PRO1184, PRO1194, PRO1191, PRO1191,

CC PRO1381, PRO136, PRO1184, PRO1194, PRO1191, PRO1194, PRO1191,

CC PRO1891, PRO1186, PRO1194, CO PRO1196, PRO1194, PRO1191,

CC PRO5940, PRO6079, PRO1186, PRO1194, PRO1174, PRO1194, PRO4181,

CC PRO5923, PRO5725, PRO1186, PRO1194, PRO1174, PRO5778, PRO4181,

CC PRO5929, PRO788, PRO1184, Or PRO7425 polypeptide are useful for

CC Inhibiting the proliferation of normal human dermal fibroblast cells. PRO

CC PRO5929, PRO788, PRO1184, Or PRO7425 polypeptide are useful. For

CC PRO5929, PRO788, PRO1184, Or PRO7425 polypeptide are useful. For

CC PRO5929, PRO788, PRO1184, PRO1194, PRO1174, PRO5774, PRO5773, PRO4189,

CC PRO5929, PRO788, PRO1184, Or PRO7425 pro116714, PRO5774, PRO polypeptide.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

100.0%; Score 1679;

960 180 240 240 300 300 480 480 540 540 600 600 99 099 720 720 780 780 840 900 180 360 420 420 120 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCTCAG 781 GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 781 GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 961 CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT GGCCTCCAACAAGCTGGGCCACCACCATGCCAGCATGCTATTTGGTCCAGGCGCCGT 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCCGCAGGGGGAGGGGCGCCACCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTTA GIGCACTATIGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC GGTTGGCTTTGTGAGGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGATA CAAGGATGACAAAGACTGATTGAAGGAAAGGGGGTGAAAAGTGGAAAAACAGACCTTT CAAGGATGAAAAAGACTGATTGAAGGAAAGAAAGGAAGGGGTGAAAGTGGAAAACAGACCTTT GGTGCAGACAGACCACCCAAAAGACCTCTAAGGGTCCACCTCATTGTGCAAGTATCTCC GGTGCAGACAGACAACCAACGAAAAAACCTCTAGGGTCCACCTCATGTGCAAGTATTCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 601 CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 961 CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT 1 GIIGHELLIAGCAAAACAGIGGAIIIAAAICICCIIGCACAAGCIIGAGGCAACAC AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAA GCAGTACAGCATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 100.08; Best Local Similarity 100 Matches 1679; Conservative 901 541 61 121 301 301 361 361 421 421 481 481 721 g 8 8 9 9 à g ò g g δ g 8 8 \$ B \$ 음 ò g à ⋩ 8 셤 8 g δ d ò g ò 요 Š

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                                                                                                                                                                                                                                                                                                                             Human; secreted and transmembrane protein; PRO; gene; se; cytostatic; vulnerary; antiarthritic; pericyte cell proliferation; pericyte cell proliferation; chondrocyte cell differentiation; tumour necrosis factor alpha release; (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour; lung tumour; colon tumour; breast tumour; prosetate tumour; rectal tumour; lissue typing; chromosome mapping; gene mapping;
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                                                                                                                  CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCCAAGGGCCTCAGCCTC
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29-JUN-2001; 2001WO-US021066.
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The invention describes an isolated PRO (secreted and transmembrane)

CC polypeptide (1). PRO932, PRO1160, PRO1187 or PRO1329 polypeptide are
useful for stimulating the proliferation of or gene expression in

CC cerismulating the proliferation or differentiation of chondrocycle

CC retimulating the proliferation or differentiation of chondrocycle

CC cells. PRO231, PRO225, PRO1155, PRO1155, PRO1196, PRO1119, PRO214,

CALPA FRO231, PRO357, PRO725, PRO1186, PRO1119, PRO1119,

CALPA FRO337, PRO525, PRO1186, PRO1186, PRO1191, PRO1191,

CRO1286, PRO1381, PRO1126, PRO1186, PRO1186, PRO10111, PRO1191,

CRO1286, PRO1381, PRO1186, PRO1186, PRO1197, PRO1274, PRO1191, PRO1191,

CRO1286, PRO1381, PRO1186, PRO1186, PRO1197, PRO1071, PRO1191,

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CRO1887, PRO1188, PRO4191, PRO1190, PRO1197, PRO1197, PRO1197,

CRO1887, PRO5188, PRO4194, PRO1196, PRO1197, PRO1197, PRO1197,

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CRO1887, PRO5188, PRO1184, PRO1194, PRO5178, PRO5178, PRO4188,

CRO1887, PRO5188, PRO5188, PRO1188, PRO5188, PRO5188,

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                                                               Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephan JF, Watanabe CK, Wood WI;
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Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                  New PRO polypeptide and nucleic acid encoding the polypeptide, gene therapy, chromosome identification, tissue typing, or as hybridization probes in chromosome and gene mapping.
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(GETH ) GENENTECH INC.
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P-PSDB; ADE20754.
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The invention describes an isolated PRO (secreted and
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P-PSDB; ADE39051.
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Grimaldi JC,
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                             GTGCACTATTGACAACCGGGTCACCCGGGTGGCTTAAACCGCAGCACCATCTTTA
                                          GTGCACTATTGACAACCGGGTCACCGGGTGGCCTGGCTAAACCGCAGCAGCATCCTCA
                                                                 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACAACCAAAC
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01-JUN-2001; 2010WO-US017800.
29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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Gurney AL,
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polypeptide (I). PROS82, PRO1160, PRO1187 or PRO1329 polypeptide are useful for stimulating the proliferation of or gene expression in pericyce cells. PRO357, PRO129, PRO1525, PRO1405 polypeptide are useful for stimulating the proliferation or differentiation of chondrocyte cells. PRO357, PRO155, PRO1155, PRO1366 or PRO1494 polypeptide are useful for stimulating the zelease of tumour necrosis factor (TWF) are useful for stimulating the zelease of tumour necrosis factor (TWF). PRO244, PRO357, PRO352, PRO1365, PR 88888888888888888888888888888888888888

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Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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100.0%; Score 1679; DB 1; Length 1679;

Best Local Similarity 100.0%; Pred. No. 6.7e-05;

Matches 1679; Conservative 0; Mismatches 0; Indels 0; 121 421 241 241 301 361 Н н 121 181 301 361 421 성 유 6 6 6 6 6 8 8 8 ò

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1621 GTAGACTGTGCCACCACCACGGCGTGTGTTGTGAAAACGAAATAAAAAAAGAGCAAAAAAA 1679 Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration. Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z; BP Human PRO polynucleotide #188. 09-DEC-1999; 99US-0170262P. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072. ADD87924 standard; cDNA; 1679 16-MAY-2002; 2002US-00147523 29-JAN-2004 (first entry) (GETH) GENENTECH INC. WPI; 2004-020237/02. P-PSDB; ADD87925. US2003092113-A1. Homo sapiens. 15-MAY-2003. ADD87924; 1561 1621 RESULT 12

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New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or cancer. Claim 2; Fig 375; 637pp; English.

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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TWP-alpha) from human blood, a method for stimulating the factor-alpha (TWP-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The olymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antiscence RNA and DNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are used in preparing a condition responsive to the polypeptides or medicament for treating a condition responsive to the polypeptides or

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661 GGTTGGCTTTGTGAGGGGGGATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 721 AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA

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antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular endothalial cells, for modulating the uptake of glucoseo or FRA by skeletal muscle cells, for modulating the uptake of cluscose or FRA by skeletal muscle cells, for stimulating termination of adjacothe cells, for stimulating proliferation of inner ear utricular supporting cells or T-lymphocyte cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and carthitis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, arthoriar cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polynucleotide of the invention. Note: The sequence data for this patent is also available in electronic format from USPTO at sequence.html.
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                                                          901 CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGGTGAAAGTGGAAAACAGACCTTT
                                                                                                              GGTCTTGCACCTGCTTCTCAAATTTTGATGTGCCACTTCCCCACCCGGGAAAGGCT
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ADD86328 standard; cDNA; 1679 Human PRO polynucleotide #188 (first entry) 29-JAN-2004 ADD86328 RESULT 12
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Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; artiliage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthiits; rheumatoid arthritis; hemoglobin-associated disorder thalassaemia; immune system cell infiltration.

Homo sapiens

JS2003203440-A1.

30-OCT-2003.

29-MAY-2002; 2002US-00157798.

05-JUN-2000; 2000US-0209832P. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

3 Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G: Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2004-021363/02. P-PSDB; ADD86329.

in or New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 PRO4978, useful in molecular biology, chromosome and gene mapping, generating antisense RNA and DNA, and in gene therapy.

Claim 2; Fig 375; 637pp; English

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis conjugation or stimulating the release of tumour necrosis and profiferentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrean). Hung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The colymucleotides are useful in molecular biology, including uses a polymucleotides are useful in molecular biology, including uses a colon breast, prostate, proplypeptides by recombinant techniques and in antisense RNA and bunk and in gene therapy. The polymucleotides may also antisense RNA and bunk and screening or knock-out animals which are useful in the development and screening or knock-out animals which are useful in the development and screening or knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of knock-out animals which are useful in the development and screening of the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or fundation of organization of adipocyte cells, for stimulating proliferation of organization of adipocyte cells, for stimulating cells or 1-lymphocyte cells, for inducing endothalial cells or adipocyte cells, for stimulating cells or 1-lymphocyte cells, for inducing endothalial cells or adipocyte cells, for stimulating defeates of from cartilage are useful for treating sports related joint problems or the proliferation of inner ear utricular such as sports injuries and cartilage defects, ost-osatharitis and rheumatoid arthritis. PRO polypeptides which stimulassaemias and conditions or associated disorders such as various thalassaemias and conditi

O	δ	1021 GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCAGGCGCCGT 1080
Match 100.0%; Score 1679; DB 1; Length 1679; Local Similarity 100.0%; Pred. No. 6.7e-05; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	q0	GGCCTCCAACAAGCTGGGGCCACATGCCAGCTCTTGTTTGT
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121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 180 	à 8 3	GCGGCCACCACCACCACCACACACACACACACACACACA
181 CTTCACGGGGCTGGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGGGGAGATGC 240	A G	TATACAAATTAAAATTAAAAACACAAACTCATGAAAAAAAA
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	& 8	501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA
481 GGTGCAGACAGCACCACCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 540 	do do	
541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 600 	д -	1621 GTAGACTGTGCCACCACGGCGTGTTGTGAAAAAAAAAAA
601 CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATGTCTCCCAAAGC 660 	RESU ADEO	RESULT 130 ADE05597 ID ADE05597 standard; cDNA; 1679 BP.
661 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCGGGAGCAGTC 720 	XXX E	ADE05597; 29-JAN-2004 (first entry)
721 AGGGGACTACGAGTGCGGTGCCTCCAATGACGTGGCCGGGCCCGTGGTACGGAGAGTAAA 780	XX D X	Human PRO polynucleotide #63. Human, PRO, gene, ss, secreted polypeptide, transmembrane polypeptide;
GETCACCGTGAACTATCCACATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 	KW KW KW KW	tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic.
841 ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 900 	XSXX	Homo sapiens. US2003100727-A1.
901 CAAGGATGACAAAAGACTGATTGAAGGAAAGGAGAGGGGTGAAAGTGGAAAACAGACTTT 960 	\$	29-MAY-2003. 28-AUG-2002; 2002US-00229974.
961 CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT 1020 		01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480.

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The PRO polypeptides and polymucleotides are useful as pharmaceuticals, detecting tumours or interactors. They are particularly useful for detecting tumours or in blosensors or bloreactors. They are particularly useful for detecting tumours or liver tumour, breast tumour, colon tumour, breast tumour, colon tumour, breast tumour, for stimulating the release of tumour necrosis factor (TNF)-alpha from human blood, for stimulating the proliferation of chondrocyte cells, for stimulating the proliferation of or gene capression in perioyte cells of or stimulating the proliferation of or gene confidence to the proliferation of or gene confidence to the proliferation of or gene capression in perioyte cells or for stimulating the proliferation of or gene confidence NMA and DNA, in preparing PRO notleds by recombinant confidence NMA and DNA, in preparing PRO polypeptides by recombinant celhology, in generating transgenic animals or knock-out animals which reagents, in generating probes. The PRO polypeptides, or anti-PRO antibodies, are useful for preparing a medicament for treating a medicament for treating a medicament for treating or anti-PRO antibodies, such as perioyte-associated tumours and bone and/or cartilage disorders (e.g. arthritis, sports injuries), involving inducing the recombined medical such as perioyte-associated tumours and bone and/or cartilage confiderentiation of chondrocytes. The PRO polypeptides are useful as molecular markers and in tissue typing. This sequence represents a human PRO polypeotide, and in tissue typing. This
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                                     Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephan JF, Watanabe CK, Wood WI;
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100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                      The invention relates to human PRO polypeptides (secreted and
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                                                                                                                    New secreted and transmembrane PRO polypeptide useful for medicament for treating a condition that is responsive to polypeptide or anti-PRO antibody, e.g. cancer.
                                                                                                                                                                          Claim 2; Fig 125; 308pp; English.
                                     Desnoyers L,
I, Gurney AL,
             (GETH ) GENENTECH INC
                                                                              2004-008977/01
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The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polynucleotides encoding them.

The PRO polypeptides and polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for detecting tumours (e.g. lung tumour, colon tumour, breast tumour, prostate tumour, rectal tumour or liver tumour) in a mammal, for stimulating the release of tumour necrosis factor (TNF)-alpha from human blood, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene comman in periotyce cells or for stimulating the proliferation of normal human dermal fibroblasts. The PRO nucleic acids are useful as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA, in preparing PRO polypeptides by recombinant technology, in generating transgenic animals or knock-out animals which may be used in the development and screening of therapeutically useful reagents, in gene therapy, in chromosome identification, as chromosome
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TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA
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shan JF, Watanabe CK, Wood
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the PRO
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Smith V, Stephan JF,
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15-SEP-2000; 2000US-0232887P.
01-JUN-2001; 2001UW-US017800.
29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
                                                                                                                                                                                                                                                                                                                                                               Human PRO polynucleotide #63
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markers and in generating probes. The PRO polypeptides, or anti-PRO antibodies, are useful for preparing a medicament for treating a condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as perioyte-associated tumours and bone and/or cartilage disorders (e.g. arthritis, sports injuries), involving inducing the redifferentiation of chondrocytes. The PRO polypeptides are useful as molecular markers for protein electrophoresis, and in tissue typing. This sequence represents a human PRO polymucleotide of the invention. Note: The sequence data for this patent is also available in electronic format
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ADE75776 standard; cDNA; 1679 BP Human PRO polynucleotide #188. (first entry) 29-JAN-2004 ADE75776;

Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microwascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;

sports injury; proteoglycan; articular cartilage disorder;
rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
immune system cell infiltration.

Homo sapiens

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US2003211571-A1.

13-NOV-2003.

20-MAY-2002; 2002US-00152405

03-MAR-2000; 2000US-0187202P. 01-DEC-2000; 2000MO-US032678. 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

3 Gao Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Ga Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2004-051576/05. P-PSDB; ADE75777.

New secreted and transmembrane PRO polypeptide and nucleic acid encoding it, for use in gene therapy, as diagnostic markers for the presence of a disease condition, or as therapeutic targets for treating tumors, diabetes, or arthritis.

Claim 2; Fig 375; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, confidencing the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses a prisense RNA and BNA and in Gene therapy. The polymucleotides may also a thybridisation probes, in chromosome and gene mapping, in generating colon, breast, prostate and screening recombinant techniques and in the development and screening of the polypeptides by recombinant techniques and in the development and screening of knock-out animals which are useful in the development and screening of therapyurically properties or medicament for treating a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or antibodies are used in preparing a condition responsive to the polypeptides or stimulating differentiation of condition responsive cells, for scimulating of thuman microvascular muscle cells for modulating the uptake of stimulating differentiation of adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating cells or T-lymphocyte cells, for inducing endothelial cells or adipocyte cells, for stimulating and condition and for treating entrative and surfaciles and such as various home and/or cartilage defects, osteoarthritis and rhemmedologic cells. The problement and such as various thalassaemias and condition. The sequence tepresents a human PRO polymucleotide or the invention. Note: cells from usproporate or thin parent is also available in electronic formation. The sequence ceptaence data for this patent is also

Seguence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

Gaps ö 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; Live 0; Mismatches 0; Indels 0; Query Match 100. Best Local Similarity 100. Matches 1679; Conservative

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Page 206

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01-DEC-2000; 2000MO-US032678.
20-DEC-2000; 2000MO-US03456.
22-MARA-2001; 2001MO-US006520.
25-MAX-2001; 2001MO-US005520.
10-UTN-2001; 2001MO-US017092.
29-UTN-2001; 2001MO-US017660.
29-UTN-2001; 2001MO-US016692.
                       2000WO-US000277
2000WO-US000277
2000WO-US003565
2000WO-US005041
2000WO-US005841
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2000WO-US005841
2000WO-US006439
2000WO-US013705
2000WO-US014042
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2000WO-US020710.
2000WO-US023328.
                                                                                                                                             09-JUL-2001; 2001WO-US021735
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02-JUN-2000;
28-JUL-2000;
24-AUG-2000;
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(GETH) GENENTECH INC.

Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;

Perrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;

Goddard A, Godowski PJ, Grimaldi UC, Gurney AL, Hillan KJ;

Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;

Stewart TA, Tumas D, Williams PM, Wood WI;

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2004-008994/01. P-PSDB; ADE48857

New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO4993 or PRO337, useful in molecular biology, chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy.

Claim 2; SEQ ID NO 522; 460pp; English.

The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity to a manno acid sequence flower 180% amino acid sequence identity contains a manno acid sequence flower 180% amino acid sequences as given in the specification (including PRO lacking its associated signal peptide). Also included are nucleic acids encoding the PRO proteins mentioned above, a vector comprising a PRO nucleic acid), a host cell comprising the vector and producing PRO, a chimaeric molecule comprising the vector and producing PRO, a chimaeric molecule comprising antibody. PRO337 polypeptide is useful for detecting a PRO4933 polypeptide is useful for detecting PRO337 polypeptide is useful for detecting pRO4933 polypeptide is useful for detecting pRO355 polypeptide. The PRO1555 polypeptide is useful for detecting PRO355. PRO700 or PRO139 polypeptide is useful for inking a bloactive molecule to a cell expressing PRO377 polypeptide. The bioactive molecule call expressing PRO4933 polypeptide is useful for linking a bloactive molecule to a cell expressing PRO4933 polypeptide is useful for linking a bloactive molecule to a cell expressing PRO4933 polypeptide is useful for linking a bloactive molecule to a cell expressing PRO4933 polypeptide is useful for linking a bloactive molecule to a cell expressing PRO4933 polypeptide is useful for linking a bloactive molecule con a cell expressing PRO4933 polypeptide is useful PRO325, PRO700 or PRO739 polypeptide are useful for linking a bloactive molecule con a cell expressing PRO4933 polypeptide is useful for linking a bloactive molecule is useful for modulating at least one biological activity of the cell expressing PRO4933 polypeptide, where the cell is killed, PRO337 polypeptide is useful for modulating at least one biological activity of the cell expressing PRO49337 polypeptide, where the cell is killed, PRO337 polypeptide is useful for modulating at least one biological activity of the cell expressing PRO49337 polypeptide.

polypeptide or anti-PRO4993 polypeptide is useful for modulating the biological activity of the cell expressing PRO4993 polypeptide; PRO725, PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for modulating the biological activity of the cell expressing PRO1559 polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-PRO39 polypeptides and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-PRO739 polypeptides activity of the cell expressing PRO725, PRO700 or PRO739 polypeptide. The polypeptides are useful for inhibiting tumour growth, retinal disorders, sports-related joint problems, arthular cartilage defects, osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in mammals. The present sequence encodes a PRO protein. 888888888888888888

Sequence 1679 BP, 498 A, 432 C, 419 G, 330 T; 0 U; 0 Other;

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uery Ma	Match 100.0%; Score 1679; DB 1		
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	61 AATCTATCAGAAAGAAAGAAGAAGAAAAACGAACCGAAC	12	0 0
	121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 	18	0 0
	181 CTTCACGGGGCTGGCTGTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGGAGATGC	24 4	0 0
	241 CACCITCCCCAAAGTAIGGACAAGGIGAGGGCCGGCAGGGGGAGGGGCGCCTCAG 	30	0 0
	301 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGACTAACCGCAGCACCATCCTCTA	36	0 0
	361 IGCIGGGAAIGACAAGIGGIGCCIGGAICCTCGCGIGGICCTICTGAGCAACACCCAAA 	2 4 4 4 2 2	0 0
	421 GCAGTACAGCATCGAGAACGTGGATGTGTATGACGAGGCCCTTACACCTGCTC	48	0 0
	481 GGTGCAGACAGACACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATGTC 	OO	0 0
	541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGAACAATATTAGCCTCAC 	09	0 0
	601 CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC	99	0 0
	661 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCGGGAGCAGT 	7 72 72 72	0 0
	721 AGGCGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA	78	0 0
	781 GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 	8 4	00

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1500 1440 1440 1140 1200 1200 1260 1380 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC 1500 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTG 1620 CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT 1020 1020 1080 1140 960 GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCCCGT AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA CCTCTCAAAACTCATCTTCTTCAAIGTCTCTGAACATGACTATGGGAACTACACTTGCGT 1081 1261 1441 1501 1561 1561 1621 1261 1321 1441 1501 1381 1381 1021 1081 1141 1141 1201 1201 1321 841 901 196 961 901 d g g ਨੇ ద ઠે ద g 8 8 요 à 임 ò ፟ 8 8 ठ g ⋧ ያ የ ò 8 ठ 셤 음

standard; cDNA; 1679 29-JAN-2004 ADD78422 ADD78422 RESULT 134
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BP

(first entry)

secreted and transmembrane protein PRO337 cDNA Novel human

human; secreted and transmembrane protein; PRO; gene; ss; cytostatic; vulnerary; antiarthritic; pericyte cell proliferation; opericyte cell differentiation; chondrocyte cell proliferation; chondrocyte cell differentiation; tumour necrosis factor alpha release; (TNF)-alpha release; dermal fibroblast cell proliferation;

The invention describes an isolated PRO (secreted and transmembrane)

CD polypeptide (1). PRO932, PRO1160, PRO1187 or PRO1329 polypeptide are
useful for stimulating the proliferation of or gene expression in

CC estimulating the proliferation of differantiation of chondrocyte

CC stimulating the proliferation of differantiation of chondrocyte

CC are useful for stimulating the proliferation of differantiation of chondrocyte

CC are useful for stimulating the proliferation of differantiation of chondrocyte

CC alpha from human blood. PRO1155, PRO1155, PRO1106, PRO1419, PRO1419,

CR PRO1247, PRO137, PRO356, PRO185, PRO1155, PRO1106, PRO1419, PRO1910,

CR PRO1245, PRO1134, PRO1126, PRO1105, PRO1273, PRO1244, PRO1411, PRO1309,

CC PRO1266, PRO137, PRO186, PRO1106, PRO1109, PRO1273, PRO1274, PRO1411, PRO1101,

CR PRO137, PRO187, PRO187, PRO1909, PRO1919, PRO1974, PRO1917, PRO1917,

CR PRO187, PRO187, PRO187, PRO1910, PRO4931, PRO1974, PRO1917,

CR PRO1887, PRO1887, PRO1916, PRO1919, PRO1973, PRO1974, PRO1917,

CR PRO1897, PRO1887, PRO1969, PRO1979, PRO1974, PRO1974, PRO1976,

CR PRO1987, PRO1987, PRO1987, PRO1989, PRO1974, PRO1974, PRO1976,

CR PRO59940, PRO6978, PRO1984, PRO1973, PRO1974, PRO1971, PRO1976,

CR PRO59940, PRO6978, PRO1984, PRO1973, PRO1974, PRO1974, PRO1976,

CR PRO59940, PRO6978, PRO1984, PRO1974, PRO1977, PRO1987, PRO1987,

CR PRO59940, PRO6978, PRO1984, PRO1974, PRO59778, PRO498,

CR PRO5972, PRO5972, PRO1984, PRO1974, PRO59778, PRO498,

CR PRO5972, PRO5978, PRO5978, PRO1974, PRO59778, PRO498,

CR PRO5972, PRO5978, PRO5978, PRO5978, PRO5978, PRO498,

CR PRO5978, PRO5978, PRO5978, PRO5978, PRO5978, PRO5978, PRO5978,

CR PRO5978, PRO59 New PRO polypeptide and nucleic acid encoding the polypeptide, useful for gene therapy, chromosome identification, tissue typing, or as hybridization probes in chromosome and gene mapping PJ; Wood F dermal fibroblast cell differentiation inhibitor; tumour; lung colon tumour; breast tumour; prostate tumour; rectal tumour; liver tumour; tissue typing; chromosome mapping; gene mapping; gene therapy. Gerritsen ME, Goddard A, Godowski PC Smith V, Stephan JF, Watanabe CK, Claim 2, SEQ ID NO 125; 309pp; English 15-SEP-2000; 2000US-0232887P. 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480. 28-AUG-2002; 2002US-00230438 Baker KP, Desnoyers L, Grimaldi JC, Gurney AL, (GETH) GENENTECH INC. WPI; 2004-008987/01. P-PSDB; ADD78423. US2003100737-A1. Homo sapiens

ö Gaps ö Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Indels Query Match
100.0%; Score 1679; DB 1;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0;

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09-JUL-2001; 2001MO-US021735.
20-FEB-2002; 2002US-00081056.
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                                                        CTTCACGGGCTGCTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC
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                          GTTGTGTCCCTTCAGCAAAACAGTGGATTTAAATCTCCCTTGCACAAGCTTGAGAGCAACAC
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Stephan JF Pan J, SA, Marsters (Ye W; Hillan KJ, Wood WI, Gurney AL, H Williams PM, Godowski PJ, Watanabe CK,

WPI; 2004-008957/01. P-PSDB; ADE41306.

New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO205 or PRO214, useful in molecular biology, chromosome and gene mapping, in generating antisense RNA and DNA, and for treating disorders involving anglogenesis.

Claim 2; SEQ ID NO 55; 492pp; English

transmembrane polypeptide (PRO). The nucleic acid encoding a secreted and transmembrane polypeptide (PRO). The nucleic acid, a polypeptide encoded by the nucleic acid, or an agonist or antagonist, is used to treat a cardiovascular, endothelial, or angiogenic disorder in a mammal, preferably a human. The human may have suffered a myocardial infarction or has cardiac hypertrophy, trauma, a cancer, or age-related macular degeneration. The cardiac hypertrophy is characterised by the presence of an elevated level of PGP-2 alpha. A PRO polypeptide, given in the specification, or an agonist is used to inhibit or stimulate endothelial cell growth in a mammal. PRO21 or an agonist is used to induce cardiac hypertrophy. PRO1376 or PRO1499 is used to stimulate angiogenesis. PRO4302 or an agonist is used to induce endothelial cell apoptosis. A PRO polypeptide, given in the specification, or an agonist is used to induce endothelial cell upoptosis. A propertrophy given in the specification, or an agonist is used to stimulate or inhibit smooth muscle cell growth, or to induce endothelial cell tube formation. The present sequence represents a cDNA encoding a propertic of the invention.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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240 420 480 540 540 541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 600 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGAGAGCGCCCACCTCAG 300 480 AATCTATCAGGAAAGAAAGAAAGAAAAAAAACCGAACCTGACAAAAAAAGAAAAAAGAAG 120 61 AATCTATCAGGAAAGAAAGAAAGAAAAACCGAACCTGACAAAAAAGAAGAAGAAAAAG 120 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT 180 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAATGCACAATTCTATCTTTGGGCAAT 180 GIGCACTATIGACAACCGGGICACCCGGGIGGCCIGGCIAAACCGCAGCACCAICCTCIA 360 gracactarreacaaccagercaccegeresecresecraaaccecaccaccarcerra GIIGIGICCIICAGCAAAACAGIGGAIIIAAAICICCIIGCACAAGCIIGAGAGCAACAC 60 GGTGCAGACAACCACCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GGTGCAGACAGCACCCAAAGACTCTAAGGGTCCACCTCATTGTGCAAGTATCTCC GTTGTGTCCTTCAGCAAAACAGTGGATTAAATCTCCTTGCAAGCTTGAGAGCAACAC CTTCACGGGGCTGGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC Gaps . 0 Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0; 241 (361 421 61 181 181 241 301 301 481 481 421

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cells, for inducing endothelial cell tube formation and for treating various bone and/or cartilage disorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of proteoglycans from cartilage are useful for treating sports-related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO polypeptides are also useful for treating various mammalian haemoglobin-associated disorders such as various thalassaemias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence encodes a human PRO polypeptide of the invention. Note: The sequence data for this patent is also available in electronic format from the USPTO website at segdata.uspto.gov.

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Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; glucose; FFA; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                      CDNA encoding human PRO polypeptide #188
                                                       ADE23352 standard; cDNA; 1679 BP
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19-DEC-2001; 2001US-00028072.
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Smith V, Stewart TA,
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P-PSDB; ADE23353.
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                                                                                                                                  Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
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Best Local Similarity 100.
Matches 1679; Conservative
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New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or

Claim 2; Fig 375; 637pp; English.

cancer.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TMF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for chondrocyte cells and a method for proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as thrist assence, in chromosome and gene mapping, in generating christalsation probes, in chromosome and gene mapping, in generating antisense RNA and in gene therapy. The polymucleotides may also be used in preparing PRO polypeptides by recombinant techniques and in useful in the development and screening of therapeutically useful responsive to the polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides of medicament for treating a condition responsive to the polypeptides of medicament for treating and inhibiting proliferation of thuman microvascular endothelial cells, for modulating the uptake of glucose or FRA by skeletal muscle cells for stimulating proliferation of adipocyte cells, for stimulating proliferation of adipocyte cells, for stimulating proliferation of inner ear utricular supporting cells or T-lymphocyte

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Human; secreted and transmembrane protein; PRO; gene; ss; cytostatic; vulnerary; antiarthritic; pericyte cell proliferation; pericyte cell differentiation; chondrocyte cell proliferation; chondrocyte cell differentiation; tumour necrosis factor alpha release; (TNF)-alpha release; dermal fibroblast cell proliferation; Novel human secreted and transmembrane protein PRO337 cDNA ADE21245 standard; cDNA; 1679 BP (first entry) 29-JAN-2004 ADE21245; RESULT 137
ADE21245
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KW YULINEI
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The invention describes an isolated PRO (secreted and transmembrane)

CDOJYPEPTIGE (1). FR0932, PR01160, PR01187 or PR01329 polypeptide are
useful for stimulating the proliferation of or gene expression in

CC estimulating the proliferation or differentiation of chondrocyte

Exercipte cells. PR0357, PR0725, PR01155, PR01159 polypeptide are useful

CC eals. PR0231, PR0357, PR0725, PR01155, PR01169, PR01419, PR01419,

CC eals. PR0134, PR0357, PR0725, PR01155, PR01169, PR01419, PR01419,

CC ER01478, PR0137, PR0356, PR01186, PR01181, PR01411, PR01411, PR01411,

CR01266, PR0139, PR0186, PR01186, PR01181, PR01911, PR01411, PR01411, PR01186, PR01186, PR01184, PR01187, PR01187, PR01187, PR01187, PR0187, PR01878, PR0187, PR0187, PR0187, PR0187, PR0187, PR0187, PR0187, PR01 New PRO polypeptides and nucleic acids encoding the polypeptides, useful in gene therapy, chromosome identification, tissue typing, or as hybridization probes in chromosome and gene mapping. cell differentiation inhibitor; tumour; lung tumour; Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood colon tumour; breast tumour; prostate tumour; rectal tumour; liver tumour; tissue typing; chromosome mapping; gene mapping; Claim 2; Fig 125; 309pp; English. 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480. 28-AUG-2002; 2002US-00230435 Desnoyers L, C, Gurney AL, (GETH) GENENTECH INC. WPI; 2004-008986/01. P-PSDB; ADE21246. US2003100736-A1. PRO polypeptide Baker KP, De Grimaldi JC, gene therapy Homo sapiens 29-MAY-2003,

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

ô Gaps ö Length 1679; Indels Query Match 100.0%; Score 1679; DB 1; Best Local Similarity 100.0%; Pred, No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0;

AGENTATION COLAMON CONTROLLY MAINTENEN COLOMOCTIVA DE LA COLOMOCTIVA DEL COLOMOCTIVA DE LA COLOMOCTIVA DE LA COLOMOCTIVA DEL COLOMOCTIVA DE LA COLOMOCTIVA D		1321 AAGAATRCTTTGGGGGAAAGATTTTAAAAAATTGAAAATTGAAAATTGTGGTG	RESULT 138 ADD77360 ID ADD77360 XX ADD77360; XX ADD77360; XX ADD77360; XX ADD77360; XX ADD77360; XX XX ADD77360; XX XX ADD77360; XX XX Human; secreted and transmembrane protein PRO337 cDNA. XX XX Nulmerary; antiarthritic; pericyte cell proliferation; chondrocyte cell proliferation; chondrocyte cell differentiation; tumour necrosis factor alpha release; XX XX XX XX XX XX XX XX XX ADD77360; XX
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	AACAC AACAC AGAAG AGAAG AGAAG AGAAG AGATGC	CCTCAG CCTCAG CCTCTA CCTCTA CCTCTA CCTCTA CCTCTA CCTCTA CCTCTC CCAAAC CCTCAC CC	CCAAAGC CAAAGC CAAAGC GGAGTC GGAGTC GCAGTC GCACC GCAGTC GCACC GCAGTC GCACTC GCACTC GCACTC GCACTC GCACTC GCACTC GCACTC GCACTC GCACTC GCA

ME, Goddard A, Godowski PJ; Stephan JF, Watanabe CK, Wood WI; Gerritsen Smith V, Ϋ́E Desnoyers , Gurney ς, Baker KP, Grimaldi

WPI; 2004-008982/01. P-PSDB; ADD77361.

New PRO polypeptides and nucleic acids encoding the polypeptides, in gene therapy, chromosome identification, tissue typing, or as hybridization probes in chromosome and gene mapping.

Claim 2; SEQ ID NO 125; 308pp; English

The invention describes an isolated PRO (secreted and transmembrane)

CDOLypeptide (I) PRO982, PRO1160, PRO1170 or PRO139 polypeptide are
useful for stimulating the proliferation of or gene expression in

Derivyte cells. PRO357, PRO212, PRO1170 or PRO4405 polypeptide are useful

CD for stimulating the proliferation of differentiation of chondrocyte

cells. PRO317, PRO357, PRO1185, PRO1180, PRO1199 polypeptide

TRO1181, PRO317, PRO525, PRO3157, PRO1180, PRO1199 polypeptide

REO1477, PRO317, PRO526, PRO3187, PRO1181, PRO1181, PRO1181, PRO1181,

PRO1277, PRO1377, PRO526, PRO3187, PRO1182, PRO1181, PRO1181, PRO1181,

PRO1286, PRO1181, PRO1186, PRO1186, PRO1197, PRO1197, PRO1181,

PRO1181, PRO1330, PRO1186, PRO1186, PRO1197, PRO11917, PRO1141, PRO1316,

PRO1187, PRO1330, PRO1186, PRO1186, PRO1197, PRO1197, PRO1181,

PRO1887, PRO11881, PRO4187, PRO1186, PRO1187, PRO1197, PRO1181,

PRO1887, PRO11881, PRO4187, PRO1186, PRO1187, PRO1197, PRO1181,

PRO1887, PRO11881, PRO41881, PRO11884, PRO1187, PRO1181,

PRO1887, PRO11881, PRO41881, PRO11884, PRO11874, PRO1181,

PRO1887, PRO11881, PRO11884, PRO11884, PRO11874, PRO1181,

PRO1887, PRO11881, PRO5188, PRO11884, PRO11884, PRO41882,

CC PRO11887, PRO11884, PRO11884, PRO11874, PRO11874, PRO11884,

CC HINDIALING the proliferation of normal human dermal fibroblast cells.

CC Inhibiting the proliferation of normal human dermal fibroblast cells.

CC Inhibiting the proliferation of normal human dermal fibroblast cells.

CC Inhibiting the proliferation of normal human dermal fibroblast cells.

CC Inhibiting the proliferation of normal human dermal fibroblast cells.

CC Inhibiting the proliferation of normal human dermal fibroblast cells.

CC Inhibiting the proliferation of the above PRO polypeptides such as PRO6004, PRO4881, PRO7174, PRO5778, PRO4322, etc.,

CA The PRO polypeptides in the test sample as compared to the control sample

CC Invertumour. Colon tumour, breast tumour, in the mammal. The tumour is lung

CC The PRO polypeptides in and-coloula winger the PRO polypeptide

CC

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

180 240 CACCTICCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGCGCCACCCTCAG 300 120 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 180 CTTCACGGGGCTGGCTCTCTTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGTGC 240 9 9 Grigiciticadcaaaacagiggaririaaarcictrocacaagcirgagagcaaca CTTCACGGGGCTGCTCTCTTTCCAAGGAGTGCCCGTGCGCAGGGAGTGC GITGIGICCTICAGCAAAACAGIGGATITIAAAICTCCTIGCACAAGCTIGAGAGCAACAC Gaps .; 0 DB 1; Length 1679; Indels Query Match 100.0%; Score 1679; DB 1; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; 181 181 61 121 241

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                                                                                                                                                                                                                                                            GTAGACTGTGCCACCACCACGGGTGTGTGAAACGTGAAATAAAAGAGCAAAAAAA 1679
                                                                                                                                                                                                                                                                                    vulnerary; antiarthritis; pericyte cell proliferation; pericyte cell differentiation; chondrocyte cell proliferation; chondrocyte cell differentiation; tumour necrosis factor alpha release; (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; liver tumour; tissue typing; chromosome mapping; gene mapping;
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                   1441 cccacrecaagcrecarcerecaaccretrresrescaerereagecaaggereagcre
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                                                               CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC
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shan JF, Watanabe CK,
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29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
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cells. PRO231, PRO357, PRO725, PRO1155, PRO1306 or PRO1419 polypeptide are useful for stimulating the release of tumour necrosis factor (TMF)-CC PRO347, PRO337, PRO325, PRO351, PRO1305, PRO1306, PRO1419, PRO214, PRO347, PRO337, PRO326, PRO313, PRO351, PRO1603, PRO6040, PRO1419, PRO3141, PRO1309, PRO1204, PRO1337, PRO1365, PRO1136, PRO1136, PRO1136, PRO1307, PRO1309, PRO1206, PRO1307, PRO1309, PRO1307, PRO1309, PRO1307, PRO1309, PRO1301, PRO1314, PRO1316, PRO1316, PRO1307, PRO1309, PRO1307, PRO1309, PRO1307, PRO1309, PRO1307, PRO1309, PRO1301, PRO

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New nucleic acid, for the manufacture of a medicament for diagnosing or treating tumor or for measuring or detecting expression of an associated Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI; Human, PRO, gene, ss. secreted polypeptide, transmembrane polypeptide, tumour, cancer, lung, colon, breast, prostate, rectum, liver, tumour necrosis factor-alpha, TNP-alpha, blood, chondrocyte cell, pericyte cell, dermal fibroblast, bone disorder, cartilage disorder, arthritis, sports injury, cytostatic, antiarthritic. standard; cDNA; 1679 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480. Human PRO polynucleotide #63. 12-AUG-2002; 2002US-00219060. 29-JAN-2004 (first entry) Desnoyers L, (GETH) GENENTECH INC. WPI; 2004-008955/01. P-PSDB; ADD75573. US2003100064-A1. Grimaldi JC, Homo sapiens. 29-MAY-2003. Baker KP, ADD75572; ADD75572 RESULT 140 В

The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polypucleotides encoding them.

Cr The PRO polypeptides and polymucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for detecting tumours (e.g. lung tumour, colon tumour, breast tumour, colon tumour, breast tumour, rectail tumour or liver tumour) in ammman! for stimulating the release of tumour necrosis factor (TNF) alpha from human confusion to the stimulating the proliferation of or gene conditions of stimulating the proliferation of or gene expression in pericyte cells or for stimulating the proliferation of confusion probes, in chromosome and gene mapping, in generating cartisense RNA and DNA, in preparing PRO polypeptides by recombinant technology, in generating transgenic animals or knock-out animals which may be used in the development and screening of therapeutically useful cragents, in gene therapy, in chromosome identification, as chromosome markers and in generating probes. The PRO polypeptides or anti-PRO condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte associated tumours and bone and/or cartilage disorders (e.g. arthritis, sports injuries), involving inducing the recondition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte associated tumours and bone and/or cartilage condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte associated tumours and bone and/or cartilage condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte associated tumours and bone and/or cartilage condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte associated tumours and bone and/or format sequence data for this patent is also available in electronic format conditions and proper process. The proper process of the respective of the respection of the process of the sequence

Claim 2; Fig 125; 308pp; English.

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Human, PRO; gene; ss; secreted polypeptide; transmembrane polypeptide; tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TWF-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic. ВР. standard; cDNA; 1679 01-AUG-2000; 2000US-0222425P. 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. Human PRO polynucleotide #63 2002US-00216160 (first entry) US2003100708-A1. Homo gapiens 09-AUG-2002; 29-JAN-2004 1021 1201 1261 1321 1381 1381 1441 1441 1501 1501 1561 1561 1081 1141 1141 1201 1261 1321 ADD74088 1081 ADD74088 1021 8 6 8 8 8 음 강 셤 昭 格 昭 格 昭 格 දි දි ò 셤 ò 셤 8 셤 1020 ö 240 099 780 840 840 900 900 960 960 240 360 420 480 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGCCCCTTACACCTGCTC 480 540 540 900 600 9 GGTTGGCTTTGTGAGTGAAAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 720 720 780 180 180 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAAGAGCGCCTCAG 300 300 420 9 9 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGGAACACCCAAAC GTGCACTATTGACAACCGGGTCACCGGGTGGCCTGGCTAAACCGCAGCACCATCTCTA CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CAAAATTGTAGAATTTCTTCAGATATCTCCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAAACTGGTAGACCCAAAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC AGGGACTACGAGTGCGTCCAATGACGTGGCCGCCCGTGGTAAA GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CAAGGATGACAAAAGACTGATTGAAGGAAAGAAGGGGTGAAAGTGGAAAACAGACCTTT GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GGTGCAGACAGCAACCAACCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCCCCAAAGC GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG AAGAAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT Gaps ; Length 1679; G; 330 T; 0 U; 0 Other Indels Query Match 100.0%; Score 1679; DB 1; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; A; 432 C; 419 498 BP; Sequence 1679 61 121 541 19 121 181 181 241 241 301 301 361 361 421 421 481 481 541 601 661 661 721 721 781 781 841 841 901 901 961 196 601

1380 1380 1440 1440 1620 1500 1500 1560 1560 1620 CCCACTGCAAGCTGCATCGTGAACTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA GICCATAGAGACGAACAGAATGAGACCTTCCGGCCCCAAGCGTGGCGCTGCGGGCCACTTTG GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGGCGTGCGGGCACTTTG AAAGAATACTTTGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA cccacrecaagcrecarcerecaccrerrregreccagregecaagegcreagecre TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGATTATTGGTCCAGGCGCCGT GGCCTCCAACAAGCTGGGCCACAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT

09-APR-2002; 2002US-00119480

(GETH) GENENTECH INC

ĭ, ME, Goddard A, Godowski PJ; Stephan JF, Watanabe CK, Wood Gerritsen Smith V, Į,Į Desnoyers Baker KP, De Grimaldi JC,

WPI; 2004-008958/01. P-PSDB; ADD74089.

New secreted and transmembrane PRO polypeptide useful for preparing medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g. cancer.

Claim 2; Fig 125; 308pp; English

The PRO polypeptides) and the PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polymucleotides encoding them.

The PRO polypeptides and polymucleotides are useful as pharmaceuticals, deacting tumours described are useful as pharmaceuticals, detecting tumours end ploymucleotides are particularly useful for deacting tumour, rectal tumour or liver tumour) in a mammal, for stimulating the proliferation or differentiation of conditions in pericyte cells of tumour necrosis factor (TNF) alpha from human conditions and proliferation of conditions in pericyte cells or for stimulating the proliferation of condition probes, in chromosome and gene mapping, in generating contisense RNA and DNA, in preparing PRO polypeptides by recombinant technology, in generating transgenic animals of knock-out animals which may be used in the development and screening of therapeutically useful condition which is responsive to the PRO polypeptides, or anti-PRO antibodies, are useful for preparing a medicament for treating a condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and bone and/or cartilage condition of chondrocytes. The PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and bone and/or cartilage disorders (e.g. arthritis, sports injuries), involving inducing the recondition of chondrocytes. The PRO polypeptides are useful as sequence associated tumours and bone and/or cartilage molecular markers for protein electrophoresis, and in tissue typing. This sequence represents a human PRO polypeptide, and in tissue typing. The sequence represents a human PRO polypucide of the invention. Note:

The sequence data for this patent is also available in electronic format seqdata.uspto.gov/sequence.html

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

180 240 240 300 300 360 360 120 120 180 9 9 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCCGGCAGGGGGAAGCGCCCACCTCAG CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGAGAAGCGCCACCCTCAG GITGIGICCTICAGCAAAACAGIGGAITIAAAICICCTIGCACAAGCTIGAGAGCAACAC CTTCACGGGGCTGCTCTCTTCTTTCCAAGGAGTGCCCGTGCGCAGCGGAGTGC Gaps ö Query Match

100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; 121 181 181 241 241 301 301 g 8 8 8 g 8 8 ò ठ g

1020 1020 1080 1200 1380 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC 1500 840 960 960 480 480 540 540 600 600 999 660 720 720 780 780 840 900 900 420 TATACADATGADATTAGADADACACAGCCTCATGGGACAGADATTTGAGGGAGGGGAAC AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAAATTGAAAATTGCCTTGCAGATA 541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 661 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGC CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGAAAACAGACTTT 1021 GGCCTCCAACAAGCTGGGCCACACCAATGCCAGGATCATGCTATTTGGTCCAGGCGCCGT CAGCGAGGTGAGCAACGGCACGTCGAGGAGGCAGGCTGCGTCTGGCTGCTGCTCTTCT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACCTTCCCCCACCCGGGAAAGGCT AAAGAATACTTTGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA TITAGGIACAATGGAGTITICTTITCCCAAACGGGAAGAACACAGCACACCCGGGCTTGGA 481 GGTGCAGACAGACAACCCAAAGACCTCTAAGGGTCCACCTCATTGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC AGGGGACTACGAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGAAAA GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG CAAGGATGACAAAAGACTGATTGAAGGAAAAGAAAGGGGTGAAAAGTGGAAAAACAGACCTTT CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGCGTACACTTGCGT 961 CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT GGCCTCCAACAAGCTGGGCCACAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT GGTGCAGACAGCCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGA TGCTGGGAATGACAAGTGGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACCACCAAAC 421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 1321 1321 1441 106 1021 1081 1081 1141 1201 1261 1261 1381 1381 661 1201 721 781 841 901 196 361 481 541 601 721 361 421 ď 음 상 음 6 6 6 6 6 à 원 상 8 8 상 임 ઠે g ò d 8 g 8 9 d d ò g 셤 8 셤 ઠે ď ò

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us-10-017-084a-

standard; cDNA; 1679 ADD74334

29-JAN-2004 (first entry) ADD74334;

PRO polynucleotide #63 Human Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide; tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TWF-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic.

Homo sapiens

US2003100709-A1.

29-MAY-2003

09-AUG-2002; 2002US-00216162

25-JUL-2000; 2000US-0220585P. 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480.

(GETH) GENENTECH INC

Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood Baker KP, Desnoyers L, Grimaldi JC, Gurney AL,

WPI; 2004-008959/01 P-PSDB; ADD74335.

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New secreted and transmembrane PRO polypeptide useful for preparing medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g. cancer. Claim 2; Fig 125; 309pp; English. RESULT 142
ADD74334
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XX B Human;
XX Human;
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The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polymuclectides encoding them.

The PRO polypeptides and polymuclectides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for detecting tumours (e.g. lung tumour, colon tumour, breast tumour, prostate tumour, lettal tumour necrosis factor (TNF)-alpha from human projected tumour necrosis factor (TNF)-alpha from human blood, for stimulating the proliferation of differentiation of conductory cells, for stimulating the proliferation of or gene expression in perior cells or for stimulating the proliferation of or gene commal human dermal fibroblasts. The PRO nucleic acids are useful as hyridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA, in preparing PRO polypeptides by recombinant technology, in generating transgenic animals or knock-out animals which

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may be used in the development and screening of therapeutically useful reagents, in gene therapy, in chromosome identification, as chromosome markers and in generating probes. The PRO polypeptides, or anti-PRO antibodies, are useful for preparing a medicament for treating a condition which is responsive to the PRO polypeptides or anti-PRO disorders, such as perioyte-associated tumours and hone and/or cartilage disorders, such as perioyte-associated tumours and hone and/or cartilage disorders (e.g. arthritis, sports injuncies), involving inducing the redifferentiation of chondrocytes. The PRO polypeptides are useful as molecular markers for protein electrophoresis, and in tissue typhing. This sequence represents a human PRO polymucleotide of the invention. Note: The sequence data for this patent is also available in electronic format at seqdata.uspto.gov/sequence.html. 8888888888888888

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

099 720 720 780 780 600 9 180 240 240 300 360 420 420 480 480 540 600 9 GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG GIGCACTAITGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCTTTA GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCTTA GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC GGTGCAGACAGACCACCCAAAGACCTCTAAGGTCCACCTCATTGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCTCAG GCAGTACAGCATCGAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC .; 0 Query Match
Best Local Similarity 100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; 481 541 541 661 721 721 361 361 421 601 601 661 241 301 301 421 481 Н 61 **6 B 6** 8 8 8 8 දු දු ર્જ 8 & 8 පු දු g ò 요 요 8 8 g 셤 8 8 õ ઠે

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human; secreted and transmembrane protein; PRO; gene; ss; cytostatic; vulnerary; antiatrhitic; pericyte cell proliferation; pericyte cell differentiation; chondrocyte cell proliferation; chondrocyte cell differentiation; tumour necrosis factor alpha release; Novel human secreted and transmembrane protein PR0337 cDNA ADD76064 standard; cDNA; 1679 BP (first entry) 29-JAN-2004 ADD76064; RESULT 143

The invention describes an isolated PRO (secreted and transmembrane)

polypeptide (1). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are
useful for stimulating the proliferation of or gene expression in

pericyte cells. PRO357, PRO725, PRO1252 polypeptide are useful

for stimulating the proliferation or differentiation of chondrocyte

cells. PRO231, PRO357, PRO725, PRO1155, PRO1196, PRO1419, PRO1419,

Albha from human blood. PRO0185, PRO1155, PRO1106, PRO1419, PRO1419,

RRO247, PRO131, PRO356, PRO1186, PRO1186, PRO1419, PRO1419, PRO1419,

RRO1478, PRO1314, PRO1126, PRO1186, PRO1191, PRO1411, PRO1411,

PRO1186, PRO1314, PRO1126, PRO1186, PRO1713, PRO1614, PRO1411, PRO1191,

RRO1343, PRO1349, PRO358, PRO1186, PRO1192, PRO1274, PRO1411, PRO1191,

RRO1343, PRO1359, PRO3434, PRO1196, PRO1413, PRO1411, PRO1191,

RRO1343, PRO5135, PRO4194, PRO1196, PRO1734, PRO1411, PRO1311,

RRO1343, PRO5135, PRO4194, PRO1196, PRO1734, PRO1411, PRO1191,

RRO1343, PRO5136, PRO4194, PRO1106, PRO1733, PRO1544, PRO1111, PRO1191,

RRO1349, PRO5136, PRO1184, PRO1194, PRO1173, PRO1414, PRO1111,

RRO1343, PRO5132, PRO1184, PRO1194, PRO1173, PRO1414, PRO1176,

RRO1340, PRO5032, PRO1184, PRO1194, PRO1173, PRO1414, PRO1176, PRO1186,

RRO1340, PRO5032, PRO1184, PRO1194, PRO1173, PRO1481, PRO1184, PRO5178, PRO1184, PRO1884, PRO1884, PRO1884, PRO18 New secreted and transmembrane PRO polypeptides and nucleic acids, useful in gene therapy, or for preparing a medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g. Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI; tumour: dermal fibroblast cell differentiation inhibitor; tumour; lung colon tumour; breast tumour; prostate tumour; rectal tumour; liver tumour; rissue typing; chromosome mapping; gene mapping; Claim 2; SEQ ID NO 125; 308pp; English. L3-AUG-2002; 2002US-00219467. 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480. Desnoyers L, (GETH) GENENTECH INC. WPI; 2004-008968/01. P-PSDB; ADD76065. US2003100718-A1. Baker KP, De Grimaldi JC, Homo sapiens. gene therapy 29-MAY-2003. cancer.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

Length 1679;

Score 1679; DB 1; Pred. No. 6.7e-05;

100.0%;

Query Match Best Local Similarity

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GTCCATAGAGAACGAACAGAATGAGACCTTCCGGCCCCAAGCGTGGCGCTGCGGGCACTTTG 1620
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                                                                                                                                                                                                                                                                                                                                                                                                         human, secreted and transmembrane protein, PRO, gene, ss. cytostatic, vulnerary, antiarthritc; pericyte cell proliferation, pericyte cell differentiation, chondrocyte cell proliferation, chondrocyte cell differentiation, tumour necrosis factor alpha release (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour, lung tumour; colon tumour, breast tumour; prostate tumour; rectal tumour; lung tumour; lissue typing; chromosome mapping; gene mapping;
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2001WO-US021066.
2002US-00119480.
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(GETH) GENENTECH INC

PJ; Wood WI; Gerritsen ME, Goddard A, Godowski I Smith V, Stephan JF, Watanabe CK, , Desnoyers JC, Gurney Baker KP, Grimaldi

WPI; 2004-008971/01. P-PSDB; ADD85557.

New secreted and transmembrane PRO polypeptides and nucleic acids, useful in gene therapy, or for preparing a medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g. cancer.

Claim 2; SEQ ID NO 125; 308pp; English.

The invention describes an isolated PRO (secreted and transmembrane)

Dolypeptide (I). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are

useful for stimulating the proliferation of or gene expression in

periotyce cells. PRO357, PRO222, PRO1272 or PRO465 polypeptide are useful

cor stimulating the proliferation of differentiation of chondrocyte

cells. PRO357, PRO525, PRO1356, PRO3136, PRO1419, PRO1419,

RD0121, PRO3131, PRO357, PRO755, PRO1306, PRO1419, PRO214,

PRO147, PRO3131, PRO356, PRO3157, PRO1755, PRO1306, PRO1419, PRO1414,

PRO1478, PRO1131, PRO1266, PRO1005, PRO899, PRO1717, PRO1141, PRO1109,

PRO1478, PRO13130, PRO1367, PRO1106, PRO1373, PRO1274, PRO1117, PRO11060, PRO1367,

PRO1478, PRO3137, PRO5266, PRO1005, PRO10073, PRO1274, PRO1117, PRO11060, PRO1367,

PRO1478, PRO3137, PRO3157, PRO1106, PRO1373, PRO1376, PRO1386,

PRO1981, PRO3295, PRO1887, PRO1106, PRO1373, PRO1376, PRO1386,

PRO1981, PRO3296, PRO886, PRO11061, PRO4333, PRO3444, PRO3132,

PRO1982, PRO5223, PRO788, PRO11061, PRO4333, PRO3444, PRO4312,

PRO1981, PRO3296, PRO1886, PRO11061, PRO4333, PRO1468, PRO4302, PRO4408,

PRO5223, PRO5725, PRO7184, PRO1174, PRO1917, PRO1176, PRO1376,

PRO181, PRO229, PRO788, PRO11844, PRO1277, PRO1184, PRO4332, PRO5728,

PRO5223, PRO5725, PRO7184, PRO4934, PRO4302, PRO4408,

PRO5240, PRO5240, PRO50604, PRO60644, PRO4272, PRO1486, PRO4302, PRO4408,

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PRO5240, PRO5240, PRO50604, PRO4582, PRO17144, PRO5778, PRO4408,

PRO5240, PRO5240, PRO50604, PRO4582, PRO7784, PRO5778, PRO4408,

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Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

120 120 180 180 240 240 9 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 1 Grigicicircacaaacacigariraaarcrocriccacaagcricaagacaaca AATCTATCAGGAAAGAAAGAAAAAAACCGAACCTGACAAAAAAGAAGAAAAAGAA 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT CTTCACGGGCTGCTCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCAGAGAAGA CTTCACGGGGCTGCCTGCTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGAGATGC 0; Gaps Query Match

100.0%; Score 1679; DB 1; Length 1679;

Best Local Similarity 100.0%; Pred. No. 6.7e-05;

Matches 1679; Conservative 0; Mismatches 0; Indels 0; 121 61 61 181 ઠે B 6 B 6 셤 8

1020 1080 1320 540 540 600 840 840 900 960 960 480 480 009 999 999 720 720 780 780 900 360 360 420 TATACAAATTGAAATTAGAAAGAAACACACCTCATGGGACAGAAATTTGAGGGGGGAAC 481 GOTGCAGACAGACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CAGCGAGGTGAGCAACGCCACGTCGAGGAGGGCAGGCTGCGTCTGGCTGCCTCTTCT GGTCTTGCACCTGCTTCTCAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCACACCCCAAAC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGCCCCTTACACCTGCTC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACACTCTCTCCCAAAGC GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT GGTCTTGCACCTGCTTCTCAAATTTTGATGTGCCACTTCCCCCACCCGGGAAAGGCT GCCGCCACCACCACCAACACACAGCAATGGCAACACGGACAGCAACCAATCAGATA CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCCTCAG GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCAAAC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACACCTGCTC GGTGCAGACAGACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC **AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCCCGTGGTACGGAGAGTAAA** CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGAAAACAGACCTTT 901 CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGGAAAACTCAGACCTTT GGCCTCCAACAAGCTGGGCCACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT CAGCGAGGTGAGCAACGCCACGTCGAGGAGGGCAGGCTGCTGCTGCTGCTGCTGCTCTTCT 1081 361 601 661 721 781 781 841 901 961 1021 1141 1141 1201 1201 1261 1261 361 421 421 481 541 601 196 1081 241 241 301 엄 셤 ò 셤 요 셤 ठे 쉱 ò 원 셤 ઠ્ઠ 셤 ò 심 $\dot{\delta}$ g ò g à 엄 $\dot{\delta}$ 엄 \$ ઠે g $\dot{\circ}$ 셤 ठ ò ò 셤 ò ŝ

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Human; gene; 88; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; artifiage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarbritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration. cDNA encoding human PRO polypeptide #188. ADE23904 standard; cDNA; 1679 BP (first entry) 29-JAN-2004 ADE23904; RESULT 145

03-MAR-2000; 2000US-0187202P. 01-DEC-2000; 2000WO-US032678. 19-DEC-2001; 2001US-00028072. 03-MAY-2002; 2002US-00137864. JS2003092110-A1. Homo sapiens 15-MAY-2003.

(GETH) GENENTECH INC.

Gao Beresini M, Deforge L, Desnoyers L, Filvaroff E, Ga ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z; Baker KP, Serritsen Smith V,

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WPI; 2004-020235/02. P-PSDB; ADE23905.

New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or

Claim 2; Fig 375; 637pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) From human blood, a method for stimulating the polypeptide, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, coroliferation or differentiation of chondrocyte cells and a method for oproliferation probes, in chromosome and gene mapping, in general, proposed, in gene therapy. The polymucleotides may also a stiesnase RNA and blook polypeptides by recombinant techniques and in generating propolypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful cueful in the development and screening of therapeutically useful cueful in the development and screening of therapeutically useful antibodies, such as tumours, for stimulating and inhibiting proliferation of human microvascular modothelial cells, for modulating the uptake of glucose or FRA by skeletal muscle cells, for modulating the uptake of glucose or FRA by skeletal muscle cells, for stimulating differentiation of angipocyte cells, for stimulating cells or T-lymphocyte cells, for inducing endothelial cells or adjpocyte cells, for stimulating and preparation of angipocyte cells, for stimulating cells or T-lymphocyte cells, for inducing endothelial cells or adjpocyte cells, for stimulating and cartilage are useful for treating various mammalian hammolobies.

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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polymuclectides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TWF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for colin, breast, prostere, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating antibation proparing PRO polypeptides by recombinant techniques and in generating either transgenic animals or knock-out animals which are useful in the development and screening of krazgeurically which are useful in the development and screening of the preparing a condition responsive to the polypeptides or medicament for treating a condition responsive to the polypeptides or
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Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrend; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; PFA; skeletal muscle cell; adipocyte cell; glucose; PFA; inner ear utricular supporting cell; pericyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis, haemoglobin-associated disorder thalassaemia; immune system cell infiltration.
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è q	y 841 ACAAAAGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA	CCTCAGCAGAATTCCAGTGGTA 900
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장 A	Y 1321 AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAGAAATTGAAATTGCCTTGCAGATA Db 1321 AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAGAAATTGAAAATTGCCTTGCAGATA	138
ò	2y 1381 TTTAGGTACAATGGAGTTTTCTTTCCCAAACGGGAAGAACACACAC	SAACACACCCCGGCTTGGA 1440
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3 5	2y 1441 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCCAGTGTGGGCAAGGGCTCAGCTC	AGTGTGGCAAGGGCTCAGCTC 1500
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ò	2y 1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGGGTGGCGCTGCGGCCATTG	162
д	1561	16
જે તે	2y 1621 GTAGACTGTGCCACCACGGCGTGTTGTGAAACGTGAAATAAAAAGGGCAAAAAAAA	AAATAAAAGAGCAAAAAAAA 1679
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ADD8 10	ADB87372 ID ADD87372 standard; cDNA; 1679 BP.	
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智	on Human PRO polynucleotide #188.	

GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 720

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GCTTGGCTTTGTGAGTGAAGACGAATACTTGGAATTCAGGGCATCACCCGGGAGCAGTC

AGGGGACTACGAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGTAAA 780

Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FRA; skeleral miscle cell; adipocyte cell; glucose; FRA; inner ear utricular supporting cell; pericyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports alpiury; proteoglycan; articular cartilage defect; osteoarthritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration. 17-MAY-2002; 2002US-00147499 US2003203439-A1 Homo sapiens. 30-0CT-2003.

04-AUG-1998; 98US-0095301P. 02-JUN-1999; 99WG-US012252. 30-MAR-2000; 2000US-00380137. 30-MAR-2000; 2000WG-US008439. 01-DEC-2000; 2000WG-US032678.

(GETH) GENENTECH INC

3 Gao Deforge L, Desnoyers L, Filvaroff E, Ga A, Godowski PJ, Gurney AL, Sherwood S; Tumas D, Watanabe CK, Wood WI, Zhang Z; Baker KP, Beresini M, Gerritsen ME, Goddard Smith V, Stewart TA,

WPI; 2004-021362/02. P-PSDB; ADD87373.

in in New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 PRO4978, useful in molecular biology, chromosome and gene mapping, generating antisense RNA and DNA, and in gene therapy.

Claim 2; Fig 375; 648pp; English.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNT-alpha) from human blood, a method for stimulating the present at unour in a mammal (e.g. adrenal, lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polynucleotides are useful in molecular biology, including uses as hybridisation probes, in chromosome and gene mapping, in generating at the certain probes, in chromosome and gene mapping, in generating at the transgenic animals or knock-out animals which are used in preparing PRO polypeptides by recombinant techniques and in generating ather transgenic animals or knock-out animals which are used in the development and screening of therapeutically useful ragents. The PRO polypeptides or antibodies are used in preparing a medicament for treating a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating differentiation of adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating condifferation of antibodies, such as tumours, for stimulating and inhibiting proliferation of inner ear utricular supporting cells, for stimulating condifferation of alivorders such as sports injuries and arthritis. PRO polypeptides which stimulate the release of protecglycans from arthidise are also useful for treating sports related joint problems, articular cartilage defects, osteoarthritis and rheumatoid arthritis. Reconsidered and sorders such as sports injuries and associated disorders such as various thalassameias and conditions which may benefit from enhanced local immune system cell infiltration. This sequence represents a human PRO polymorpetide of the invention. Note:

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The sequence data for this patent is also available in electronic format from USPTO at seqdata.uspto.gov/sequence.html.
                                                                                                                                                                      GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGGCAACAC
                                                                                                                                                                                                                   AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT
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                                                  Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
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Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0;
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A, Godowski P Watanabe CK,

Gerritsen ME, Goddard Smith V, Stephan JF,

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The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polymucleotides encoding them.

The PRO polypeptides and polymucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for prostate tumour, reclaid tumour or liver tumour, breast tumour, prostate tumour, cells that the proliferation of prostate tumour or liver tumour) in amammal, for prostate tumour or liver tumour) in amammal, for prostate tumour cells, for stimulating the proliferation of or gane chood, for stimulating the proliferation of or gane expression in pericyte cells, for stimulating the proliferation of or gane ormal human dermal fibroblasts. The PRO nucleic acids are useful as hybridisation probes, in chromosome and gene mapping, in generating an expension in preparing transgenic animals or knock-out animals which can be used in the development and screening of therapputically useful reagents, in generating probes. The PRO polypeptides, or anti-PRO antibodies, are useful for preparing a medicament for treating a condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and bone and/or cartilage disferentiation of chondrocytes. The PRO polypeptides are useful as markers for protein electrophoresis, and in tissue typing. This sequence represents a human PRO polymeptides are useful as markers for protein electrophoresis, and in tissue typing. This sequence represents a human PRO polymeptides. New secreted and transmembrane PRO polypeptides and nucleic acids, useful in gene therapy, or for preparing a medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g. Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Claim 2; Fig 125; 308pp; English 05-JUN-2000; 2000US-0209832P. 15-SEP-2000; 2000US-0232887P. 01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480. Baker KP, Desnoyers L, Grimaldi JC, Gurney AL, (GETH) GENENTECH INC. WPI; 2004-008976/01. P-PSDB; ADE05106. 1380 1440 1500 1620 1140 1140 1200 1260 1320 1080 AAAGAATACTTTGGGGGGGAAAAGAGTTTTAAAAAAAAATAGAAATTGACCTTGCAGATA 1380 1560 TCTGCCCACAGAGTGCCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560 1080 GCCGCCACCACCACCACCACACACACAGCAATGGCAACACCGACAGCAACCAATCAGATA 1260 cccacrecaaecrecarcerecrerrregreccaerecaareregecaagecreaecere 1500 GTCCATAGAGACGAACAAATGAGACCTTCCGGCCCCAAGCGTGGCGCTGCGGGCACTTTG 1620 1621 GTAGACTGTGCCACCACCACCACGTGTGTGAAACGTGAAATAAAAAAGAGCAAAAAAA 1679 GGTCTTGCACCTGCTTCTCAAATTTTGATGTGGGTGCCACTTCCCCACCCGGGAAAGGCT GCCGCCACCACCACCAACACAGCAATGCCAACACCGACAGCAACCAATCAGATA TATACAAATTTAGAAGAAACACAGCCTCATGGGACAGAAATTTGAGGGAAG TTTAGGTACAATGGAGTTTTTCTTTTCCCAAACGGAAGAACACACGCACACCCGGCTTGGA GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGTGCGCGGACCTTTG caeceaegreaecaaceacerceaegaegecaecrecercreecrecrecrecrerrer GGTCTTGCACCTGCTTCTCAAATTTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT **AAAGAATACTTTGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA** CCCACTGCAAGCTGCATCGTGCAACCTCTTGGTGCCAGTGTGGGCCAAGGGCTTCAGCCTC TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGGGT GGCCTCCAACAAGGCGGCCACAATGCCAGCATCATGCTATTTGGTCCAGGCGCGT edecriceaacaageredeceacacaardecaacarcargerarrragrecaagegeer CAGCGAGGTGAGCAACGGCACGTCGAGGAGGGCAGGCTGCGTCTGGCTGCTGCCTCTTCT

Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0;

ö 120 9 60 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGGTTGAACAC Gaps ö 0 61 ð d ઠે

180 120 CTTCACGGGCTGCTGCTCTCTTCTTCCAAGGAGTGCCCCGTGCGCAGCGGAGATGC 240 CACCTTCCCCAAAGCTATGGACAACGTGACGTCCGGCAGGGGGAGAGCGCCCACCTCAG 300 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 61 181 241 121 181 요 원 셤 ò 셤 ò

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antisense RNA and DNA, in prepatechnology, in generating trans		markers and in generating probes. The PRO polypeptides, or antihodis are useful for preparing a medicament for tre	condition which is responsive to the PRO polypeptides or anti-PRO	disorders (e.g. arthritis, ports injuries), involving inducing the re-				<pre>Query Match Best Local Similarity 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0; Gaps 0;</pre>		1 GTTGTGTCCTTCAGCAAAACAGTGGAATTTAAATCTCCTTGCAAAAGCAAACAA	61 PATCTATCAGGAAAGAAAGAAAAAAACGAACCTGAAAAAAAA	121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT	121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT	, 181 CTTCACGGGGCTGCTCTGTGTCTCTCCAAGGAGTGCCCGTGCGCAGCGAGATGC 240 181 CTTCACGGGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGAGATGC 240	241	241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGGCGCGCCGCCGCCGCCGCCGCCGCCGCC	301 GTGCACTATTGACAACCGGGTCACCCGGGTGGCTGACTGGCAGCAGCACCATCTTTA 360	361 IGCIGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCACACAAAC	361 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC	/ 421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGCCCTTACACCTGGTC 480 	481 GGTGCAGAGAGAGACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC	481 GGTGCAGACAGACACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC	/ 541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGAACAATATTAGCCTCAC 600		601 CIGCAIAGCAACTIGGAGCCIACGAGCCIACTIAGAGACACALCICCCAAAGC	661 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGC	721		
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RESU ADD7		
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ăă	ADD76862;	
F X	OT 29-JAN-2004 (first entry) CX	
DE	DE Novel human secreted and transmembrane protex	tein PRO337 cDNA.
ž.	W human; secreted and transmembrane protein;	PRO; gene; ss; cytostatic;

uman; secreted and transmembrane protein; PRO; gene; ss; cytost; ulnerary; antiarthritic; pericyte cell proliferation;

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chondrocyte cell differentiation; tumour necrosis factor alpha release; (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; lissue typing; chromosome mapping; gene mapping; gene therapy.
cell differentiation; chondrocyte cell proliferation;
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Homo sapiens.

US2003100715-A1.

29-MAY-2003

13-AUG-2002; 2002US-00219074

22-JUN-1999; 99US-0140650P. 30-MAX-2000; 2000MO-US014941. 01-JUN-2001; 2001MO-US017800. 29-JUN-2001; 2001MO-US021066. 09-APR-2002; 2002US-00119480.

(GETH) GENENTECH INC.

Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI; Baker KP, Desnoyers L, Grimaldi JC, Gurney AL,

WPI; 2004-008965/01. P-PSDB; ADD76863.

New secreted and transmembrane PRO polypeptide useful for preparing a medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g. cancer. medicament

Claim 2; SEQ ID NO 125; 308pp; English.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

Query Matc Best Local Matches 16	y Match 100.0%; Score 1679; Local Similarity 100.0%; Pred. No. 6 thes 1679; Conservative 0; Mismatche	DB 1; Length 1679; .7e-05; s 0; Indels 0; Gaps 0;	
λŏ	1 GITGIGICCTICAGCAAAACAGIGGAITIAAAIC	CICCITGCACAAGCITGAGAGCAACAC 6	
qq	- [-]	ccrrecacadecrreadadecacae 60	
상 임	61 AATCTATCAGGAAAGAAAGAAAGAAAAAAACGAA. 	saacctgacaaaaagaagaabaagaag 120 	
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& 8	181 CITCACGGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGAGATCCCGTGCGCAGAGATCCGAGAGATCCCGTGCGCAGAGAATGCCCGTGCGAGATGCCCGTGCGAGATGCCCGTGCGAGATGCCCGTGCAAGAAGAGAGAG	AAGGAGTGCCCGTGCGCAGCGGAGATGC 240	
Š	41 CACCTICCO	CANAGCTATGGACAACGTGACGGCAGGGAGAGAGAGAGCGCCACCCTCAG 300	
qa	CTTCCC	rcceccacededaecccaccicae 300	
ò	301 GTGCACTATTGACAACCGGGTCACCCGGGTGGC	CCTGGCTAAACCGCAGCACCATCCTCTA 36	
අු	01 GTGCACTATTGACAACCGGGTCACCCGGGTG	CCTGGCTAAACCGCAGCACCATCCTCTA 36	
ራ .	361 TGCTGGGAATGACAAGTGGTGCCTGGATCCTC	CGCGTGGTCCTTCTGAGCAACACCCAAAC 420 	
λŏ	21 GCAGTACAGCATCGAGATCCAGAACG	STATGACGAGGCCCTTACACCTGCTC 48	
ΩP	421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTG		
ò	481 GGTGCAGACAGACAACCACAAAGACCTCTA	CTAGGGTCCACCTCATTGTGCAAGTATCTCC 540	
qq	IGCAGACAGCCACCCAAAGACCT	CACCTCATTGTGCAAGTATCTC	
ें हैं	41 CAAAATTGTAGAGATTTCTTCAGATATCTC	CCATTAATGAAGGAACAATATTAGCCTCAC 600	
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දු අ	601 CTGCATAGCAACTGGTAGACCCTACGGTTACT		
ò	GTTGGCTTTGTGAGT	AAATTCAGGGCATCACCCGGGAGCAGTC 720	
q	661 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATT	CAGGGCATCACCCGGGAGCAGT	
8	21 AGGGACTACGAGTGCAGTGCCTCCAATGAC	CGTGGTACGGAGAGTAAA 7	
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ò 1	81	CAGGTGTCCCCGTGGG 8-	
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දු දු	841 ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCT 	CAGTCCCCTCAGCAGAATTCCAGTGGTA 900 	
ò	CAAGGATGACAAAAGACT		
qa	901 CAAGGATGACAAAAGACTGATTGAAGGAAAG	GATTGAAGGAAGAAGGGGTGAAAGTGGAAAACAGACCTTT 960	
δ	CTCTCAAAACTCATCTTCTTCAATGTCT	CTGAACATGACTATGGGAACTACACTTGCGT 1020	
Ωp	crcaaacrcarcrrcrrcaargrcr	actateggaactacactrece	

Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI;

Baker KP, Desnoyers L, Grimaldi JC, Gurney AL, (GETH) GENENTECH INC.

WPI: 2004-008969/01 P-PSDB; ADD86631

01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480.

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                                                                                                                                                                                                                                                            TITAGGTACAATGGAGTITITCTTTTCCCAAACGGGAAGAACACAGCACACCCGGCTTGGA
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secreted and transmembrane protein; PRO; gene; ss; cytostatic; vulnerary; antiarthritis; pericyte cell proliferation; pericyte cell differentiation; dondrocyte cell proliferation; chondrocyte cell differentiation; tumour necrosis factor alpha (TNF) alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour; lung colon tumour; breast tumour; prostate tumour; rectal tumour; lissue typing; chromosome mapping; gene mapping; Novel human secreted and transmembrane protein PRO337 cDNA (first entry) gene therapy 29-JAN-2004

release;

The invention describes an isolated PRO (secreted and transmembrane)

CC polypeptide (1). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are
useful for stimulating the proliferation of or or propagation in

CC cells. PRO357, PRO229, PRO1272 or PRO4405 polypeptide are useful for stimulating the proliferation or differentiation of chondrocyce

Cc ells. PRO351, PRO357, PRO125, PRO1195 polypeptide

are useful for stimulating the release of tumour necrosis factor (TMF)
calpha from human blood. PRO918, PRO351, PRO155, PRO1191, PRO1191, PRO1304,

PRO126, PRO137, PRO356, PRO1186, PRO1185, PRO1019, PRO1041, PRO1191,

CR PRO126, PRO1181, PRO1126, PRO1186, PRO1071, PRO1041, PRO1191,

CR PRO134, PRO137, PRO358, PRO1186, PRO1192, PRO1244, PRO1141, PRO1191,

CR PRO134, PRO137, PRO383, PRO1186, PRO1193, PRO1244, PRO1191, PRO1193,

CR PRO134, PRO1164 PRO1186, PRO1196, PRO1193, PRO1244, PRO1186,

CR PRO134, PRO1164 PRO1181, PRO1190, PRO1193, PRO1341, PRO1191,

CR PRO134, PRO525, PRO383, Or PRO1106, PRO133, PRO1344, PRO134,

CR PRO134, PRO525, PRO1184, PRO1196, PRO134, PRO134, PRO134,

CR PRO134, PRO525, PRO1184, PRO1196, PRO134, PRO134, PRO136,

CR PRO134, PRO525, PRO1184, PRO1196, PRO137, PRO148, PRO134,

CR PRO5940, PRO678, PRO1184, PRO1197, PRO137, PRO148,

CR PRO5953, PRO5725, PRO1184, PRO1197, PRO148, PRO432,

CR PRO573, PRO5725, PRO1184, PRO1197, PRO1717, PRO573, PRO433,

CR PRO573, PRO5725, PRO1184, PRO1194, PRO1717, PRO5778, PRO433,

CR PRO573, PRO5725, PRO1184, PRO1194, PRO5778, PRO433,

CR PRO573, PRO5725, PRO1184, PRO1891, PRO1717, PRO5778, PRO433,

CR PRO573, PRO5725, PRO1184, PRO5785, PRO1884, PRO4332, etc.,

CR PRO573, PRO5725, PRO1184, PRO5785, PRO1884, PRO5778, PRO4332,

CR PRO573, PRO5725, PRO5785, PRO1884, PRO5778, PRO4332,

CR PRO573, PRO5725, PRO5785, PRO5785, PRO5788, PRO578 ö New secreted and transmembrane PRO polypeptides and nucleic acids, useful in gene therapy, or for preparing a medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g. Gaps .. Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Claim 2; SEQ ID NO 125; 308pp; English. cancer.

120 9 9 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 1 GITGIGICCIICAGCAAAACAGIGGAIIIAAAICICCCIIGCACAAGCIIGAGAGCAACAC 셤 à ઠે

120 180 180 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTCTTGGGCAAT 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT g ਨੇ

14-AUG-2002; 2002US-00219469

US2003100719-A1. Homo sapiens

29-MAY-2003

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2000WO-US034956.
2001US-00796498.
2001WO-US006520.
99WO-US005028
99WO-US005190
2000WO-US006319
                                                                                                                            2000WO-US000376
                                            99WO-US021547
                                                                                    99WO-US028565
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                                        99WO-US
08-MAR-1999;
10-MAR-1999;
10-MAR-1999;
20-APR-1999;
01-4-MAY-1999;
01-SEP-1999;
                                                                                                     22-DEC-1999;
30-DEC-1999;
30-DEC-1999;
                                       15-SEP-1999
15-SEP-1999
16-OCT-1999
10-NOV-1999
10-NOV-1999
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08-NOV-2000;
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TRP-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colymelation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, colymclectides are useful in molecular bology, including uses as an including uses as an including uses as an including sense that an operating such an opyreptides by recombinant techniques and in preparing PRO polypeptides by recombinant techniques and in preparing properties or antibodies are used in preparing a constituing of therapeutically useful reagents. The PRO polypeptides or antibodies are used in preparing of the properting a condition responsive to the polypeptides or antibodies, such as tumours, for stimulating of the polypeptides or attribodies, such as tumours, for stimulating of medicament for treating and some cells, for modulating the uptake of glucose or FRA by skeltal muscle cells, for modulating the uptake of simulating of finer ear utricular supporting cells, for stimulating the proliferation of alpocyte cells, for stimulating cells or arthritis. PRO polypeptides which stimulate the release of prorecoglycans from carthiage and endor cartilage disorders such as sports related joint problems, arthritis. PRO polypeptides which stimulate the release of prorecoglycans from cartilage are useful for treating sports related joint problems, arthritis. PRO polypeptides which stimulate and subject to a secure of the invention. One sequence represents a human PRO polypulates and also useful for treating sports cells, for the invention. One of the sequence represents a human PRO pol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAAACCACA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel isolated PRO polypeptide useful for treating diabetes, hyper- or hypo-insulinemia, sports injuries, arthritis, obesity, stroke, heart attack, various coagulation disorders, tumors.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G:
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        from USPTO at segdata.uspto.gov/seguence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; SEQ ID NO 375; 638pp; English.
20-JUN-2001; 2001MO-US019692.
21-JUN-2001; 2001MS-00887879.
22-JUN-2001; 2001MO-US020116.
09-JUN-2001; 2001MO-US021135.
18-JUL-2001; 2001MO-US021735.
06-AUG-2001; 2001US-00924419.
09-AUG-2001; 2001US-00924419.
16-AUG-2001; 2001US-00924196.
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Best Local Similarity 100.
Matches 1679; Conservative
                                                                                                                                                                                                                                                                    (GETH ) GENENTECH INC.
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P-PSDB; ADE89239.
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22-FEB-2000; 2000WO-US004414.
02-MAR-2000; 2000WO-US005601.
02-MAR-2000; 2000WO-US00561.
20-MAR-2000; 2000WO-US008439.
15-MAY-2000; 2000WO-US013770.
15-MAY-2000; 2000WO-US013758.
17-MAY-2000; 2000WO-US013705.
22-MAY-2000; 2000WO-US014941.
02-JUN-2000; 2000WO-US014941.
02-JUN-2000; 2000WO-US014941.
02-JUN-2000; 2000WO-US01564.
11-AUG-2000; 2000WO-US015678.
24-AUG-2000; 2000WO-US015678.
26-FEB-2010; 2001WO-US015678.
26-FEB-2011; 2001WO-US015692.
26-JUN-2001; 2001WO-US01743.
01-JUN-2001; 2001WO-US01743.
01-JUN-2001; 2001WO-US01766.
09-JUL-2001; 2001WO-US01166.
                                                                                                                                                                (GETH ) GENENTECH INC.
                                                                                                                                                                                                                         WPI; 2004-008995/01.
P-PSDB; ADE41199.
                                                                                                                                                                                                                                                                     ovarian tumors.
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Ashkenazi AJ, Baker KP, Botstein DA, Desnoyers L, Eaton DL; Ferrara N, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A; Godowski PJ, Gurney AL, Kljavin IJ, Mather JP, Napier MA, Pan J; Paoni NF, Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM; Wood WI, Zhang Z;

New isolated, secreted and transmembrane PRO polypeptides and nucleic acids, useful for diagnosing, preventing and/or treating diabetes mellitus and tumors, such as renal, colon, breast, prostate and/or

Claim 1; SEQ ID NO 103; 259pp; English.

The invention relates to an isolated secreted/transmembrane PRO polypeptide. The polypeptide and its nucleic acid is useful as an inhibitor of vascular endothelial growth factor stimulated proliferation of endothelial cells, as a stimulator of T-lymphocyte proliferation, as an inducer of endothelial cell apoptosis, c-fos and differentiation of pancreatic beta cell precursors into mature cell, for induction of redifferentiation and/or proliferation of chondrocytes and for modulating glucose or free fatty acid (FFA) uptake by skeletal muscle cells. The polypeptide and its nucleic acid is useful for generating transgenic or knock-out animals, for tissue typing and for chromosome identification. The polypeptide is useful in a number of functional biological assays, as molecular weight marker for protein electrophoresis, and as therapeutic dynomosome and gene mapping, in the generation probe in chromosome and gene mapping, in the generation of antisense RNA and DNA, and for the preparation probe for a cDNA library to isolate the full length PRO cDNA, to isolate other cDNA and in gene therapy. The nucleic acid is also useful to the construction of hybridisation probes for mapping the gene conductor and for the genetic analysis of individuals with the generatic disorders. The present sequence represents a cDNA encoding a human secreted/transmembrane PRO polypeptide.

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

60 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTCAGAGCAACAC 0; Gaps Query Match
Best Local Similarity 100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; ઠે

61 AATCTATCAGGAAAGAAAGAAAAAAAAACCGAACCTGACAAAAAAGAAGAAAAAGAAG 120

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and gene mapping.

GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT 1200

1141 1201

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Claim 2; SEQ ID NO 125; 308pp; English

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1441 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC 1500

TCTGCCCACAGAGTGCCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA

1381 TTTAGGTACAAIGGAGTTTTCTTTTCCCAAACGGGAAGAACACAGCACACACCGGCTTGGA

1381

1321 AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA 1380

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GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTG 1620 1561 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGGCGCTGCGGGCACTTTG 1620

1560

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Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

Gaps ö Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; ઠ

release; human, secreted and transmembrane protein, PRO, gene, 88, cytostatic, vulnerary, antiarthritic, pericyte cell proliferation, pericyte cell differentiation, chondrocyte cell differentiation, tumour necrosis factor alpha release, (TNF)-alpha release, dermal fibroblast cell proliferation, dermal fibroblast cell differentiation inhibitor, tumour, lung tumour colon tumour, breast tumour, prostate tumour, rectal tumour, lissue typing, chromosome mapping, gene mapping,

01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480.

GETH) GENENTECH INC.

Gerritsen ME, Goddard A, Godowski PJ; Smith V, Stephan JF, Watanabe CK, Wood WI; Baker KP, Desnoyers L, Grimaldi JC, Gurney AL,

WPI; 2004-008981/01

Novel human secreted and transmembrane protein PRO337 cDNA. ADD78098 standard; cDNA; 1679 BP. 28-AUG-2002; 2002US-00230234 29-JAN-2004 (first entry) US2003100731-A1. gene therapy Homo sapiens 29-MAY-2003 ADD78098

polypeptide and nucleic acid useful for gene therapy, chromosome ication, tissue typing, or as hybridization probes in chromosome

The invention describes an isolated PRO (secreted and transmembrane)

CO Polypeptide (1): PRO982: PRO1160; PRO1187 or PRO1329 polypeptide are

useful for stimulating the pro1160; PRO1270 or PRO1329 polypeptide are

useful for stimulating the pro1160; PRO1272 or PRO4405 polypeptide are useful

CO stimulating the pro1166 pro1272 or PRO4405 polypeptide are useful

CO stimulating the pro1167 pro1275, PRO12106 or PRO1419 polypeptide

CO stimulating the pro1166 pro1065, PRO1080, PRO1419 polypeptide

CO STOLATO, PRO137, PRO256, PRO1065, PRO1080, PRO1419, PRO1419

9 н g 6666

120

240 240 CITCACGGGGCTGCTCTCTCTTCCAAGGAGTGCCCGTGCGCAGCAGAAGG CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG CTTCACGGGGCTGCTCTCTCTCTTCCAAGGAGTGCCCGTGCGCAGGAGATGC 181 181

241

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GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTAAACCGCAGCACCATCTCTA 360 300 CACCTTCCCCAAAGCTATGGACAACGTGCGGAGGCACGGGAGAGAGCCCACCCTCAG 241 301 301 8 % B & ò

1441 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCGCAGTGTGGGCAAGGGCTCAGCCTC 1500 1441 CCCACTGCAACGCATCGTGCAACCTCTTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC 1500 1501 TCTGCCCACAGTGCCCCCCCCAGTGTGGAAGGGCTCCAATTCAATCA 1500 1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAACTGCCCCACGTGAATTCAATCA 1560 1561 TCTGCCCACAGAGTGCCCCCACGTGGAACATCTGGAACTGCCCACGTGGACCTGCCCAAATTCAATCA 1560 1561 TCTGCCCACAGAGTGCCCCCACGTGGAACAGCGTGGACCTTCGAACTTG 1620 1611 11	AMENBAYT 155 AMENBAYT 155 AMENBAYT 155 AMENBAYT STANDARD (15-SEP-1999; 99WO-US0215
6 6 6 6 6 6 6 6	R C X C X C X C X S X X X X X X X X X X X	PR
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361 TGCTGGGAATGACAAGTGGTGCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAAC 420 361 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAAC 420 421 GCAGTACAGCATCGAGATCCAGAACGTGGTGTTGTATGACGAGGGCCTTACACCCCAAAC 420 421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCTTACACCTGCTC 480 481 GGTGCAGACACCACCCCAAAGACCTCTAGGGTCCACTTGTACACTGCTC 540 481 GGTGCAGACAACACCACCCAAAGACTCTAGGGTCCACTTGTGCAAGTTCTCC 540 541 CAAAATTGTAGAGATTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 600 541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 600		55117

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Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood MI, Zhang Z;

WPI; 2004-021079/02. P-PSDB; ADE18378.

(GETH) GENENTECH INC

08-NOV-2000; 2000MO-US030552; 08-NOV-2000; 2000MO-US030553. 09-NOV-2000; 2000MO-US030553. 09-NOV-2000; 2000MO-US030553. 09-NOV-2000; 2000MO-US030553. 09-DEC-2000; 2000MO-US034956. 28-FEB-2001; 2000MO-US034956. 09-MAR-2001; 2000MO-US006660. 09-MAR-2001; 2000MS-0086689. 22-MAR-2001; 2000MS-0086689. 09-AR-2001; 2000MS-008669. 09-AR-2001; 2000MS-0086634. 09-MAY-2001; 2000MS-00866216. 25-MAY-2001; 2000MS-0086634. 09-MAY-2001; 2000MS-0086634. 09-MAY-2001; 2000MS-0086636. 09-MAY-2001; 2000MS-0086636. 09-MAY-2001; 2000MS-0086636. 09-MAY-2001; 2000MS-0089636. 00-MAY-2001; 2000MS-0089636. 00-MAY-200

New isolated nucleic acid encoding a PRO polypeptide, e.g. PROII14 or PRO4978, for use in molecular biology, chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy.

Claim 2; SEQ ID NO 375; 638pp; English.

05-OCT-1999; 99WO-US023089.
29-NOVY-1999; 99WO-US028214.
20-NOVY-1999; 99WO-US028213.
30-NOVY-1999; 99WO-US028413.
10-DEC-1999; 99WO-US028433.
02-DEC-1999; 99WO-US028531.
02-DEC-1999; 99WO-US028554.
02-DEC-1999; 99WO-US028554.
02-DEC-1999; 99WO-US0285564.
02-DEC-1999; 99WO-US0285564.
02-DEC-1999; 99WO-US0285564.
03-DEC-1999; 99WO-US030091.
03-DEC-1999; 99WO-US030091.
03-DEC-1999; 99WO-US030091.
04-DEC-1999; 99WO-US030091.
05-DEC-1999; 99WO-US030091.
05-DEC-1999; 99WO-US030091.
06-DAN-2000; 2000WO-US000219.
06-DAN-2000; 2000WO-US0003441.
18-PEB-2000; 2000WO-US0003441.
18-PEB-2000; 2000WO-US0003441.
18-PEB-2000; 2000WO-US0005601.
01-MAR-2000; 2000WO-US005601.
02-MAR-2000; 2000WO-US005841.
03-MAR-2000; 2000WO-US005841.

The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the proliferation or differentiation of chondrocyte cells and a method for detecting the presence of a tumour in a mammal (e.g. adream), lung, colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymiclectides are useful in molecular biology, including uses as hybridisation probes, in chomosome and gene mapping, in generating cartisanse RNA and BNA and in Gene therapy. The polymiclectides may also a streams that transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful.

CC generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful.

CC generating either transgenic animals or knock-out animals which are useful in the development and screening of therapeutically useful.

CC generating either transgenic animals or knock-out animals which are useful in the development and screening of the modulating the upractical of human microvascular endothelial cells, for modulating the uptake of glucose or FRA by skeletal muscle cells, for modulating the uptake of grainlating differentiation of adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating and confiring endothelial cells, for modulating the uptake of stimulating differentiation of adipocyte cells, for stimulating and cartinities are austiled for treating such as sports injuries and articular cartilage are useful for treating sports cells, for stimulating defects, outcoarthritis and rhemmedical are also useful for treating sports represents a human PRO polymulassammalian hamoed local immune system cell infilteration. This sequence represents

28-JUL-2000; 11-AUG-2000; 23-AUG-2000; 24-AUG-2000; 08-NOV-2000; 10-DBC-2000; 20-DBC-2000; 20-DBC-2000;

06-AUG-2001; 09-AUG-2001; 16-AUG-2001; 19-DEC-2001;

181 181 241

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61 AATCTATCAGGAAAGAAAGAAAAAAAACCGAACCTGACAAAAAAGAAGAAAAAGAAAA

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121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT

1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGAACAC

1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC

Query Match
100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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ВР 97MO-USO05230.
98MO-USO12456.
98MO-USO14882.
98MO-USO118824.
98MO-USO1903.
98MO-USO1903.
98MO-USO19177.
98MO-USO19177.
98MO-USO19177.
98MO-USO19177.
98MO-USO19177.
98MO-USO19177.
98MO-USO19177.
98MO-USO19177.
98MO-USO1918. Human PRO polynucleotide #188. ADE88686 standard; cDNA; 1679. 12-APR-2002; 2002US-00121054 (first entry) US2003199054-A1. 14-SEP-1998; 14-SEP-1998; 16-SEP-1998; 17-SEP-1998; 07-OCT-1998; 29-OCT-1998; 20-OCT-1998; 06-JAN-1999; 06-JAN-1999; 10-MAR-1999; 10-MAR-1999; 11-MAR-1999; 12-MAR-1999; 14-MAR-1999; 22-MAR-1999; Homo sapiens 29-JAN-2004 23-OCT-2003 1441 1501 1501 1561 1621 1621 ADE88686; 1381 1441 RESULT 15 ADE88686 요 रु व रु 엄 8 8 ઠે 1080 1320 1020 1080 1140 1200 960 960 900 900 480 540 720 840 840 360 360 420 420 480 540 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 600 CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCCAAAGC 660 9 AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGGTAAA 780 780 CACCTICCCCAAAGCIAIGGACAACGIGACGGICCGGCAGGGGGGAGAGCGCCACCCICAG 300 CAGCGAGGTGAGCAACGGCACGTCGAGGAGGCAGGCTGCGTCTGGCTGCTGCTCTTCT TATACAAATGAAATTAGAAGAAACACAGCCCCATGGGACAGAAATTTGAGGAGGGGAAC AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAAGAAATTGAAAATTGCCTTGCAGATA GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGTGAAAGTGGAAAACAGACCTTT GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT GGTGCAGACAGACAACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CTGCATAGCAACTGGTAGACCCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCCAAAGC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGGGTGGTCCTTCTGAGCACACACCCAAAC GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA

1560 GTCCATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCGCTGCGGGGCACTTTG 1620 1440 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCCAGTGTGGGCAAGGCCTCAGCCTC TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTC

Human; gene; 88; PRO; secreted polypeptide; transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour; cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix; liver; microvascular endothelial cell; glucose; FFA; skeletal muscle cell; adipocyte cell; periovte cell; inner ear utricular supporting cell; T-lymphocyte cell; endothelial cell tube formation; bone disorder; cartilage disorder; sports injury; proteoglycan; articular cartilage defect; osteoarbritis; rheumatoid arthritis; haemoglobin-associated disorder thalassaemia; immune system cell infiltration.

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09-MAR-2001; 2001W3-00802706.
14-MAR-2001; 2001US-0080689.
22-MAR-2001; 2001US-00816744.
05-APR-2001; 2001US-00816366.
10-MAY-2001; 2001US-00854208.
10-MAY-2001; 2001US-00854280.
18-MAY-2001; 2001US-00865216.
25-MAY-2001; 2001US-008660216.
                                                                                                                                                                                                                                                                                                                                                                                                                                          01-UUN-2001; 2001WO-US017800.
05-UUN-2001; 2001US-00874503.
14-UUN-2001; 2001US-00882536.
19-UUN-2001; 2001US-00886342.
20-UUN-2001; 2001US-00886342.
21-UUN-2001; 2001US-00887879.
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                                        99WO-US028214
99WO-US028313
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99WO-US030720
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            99WO-US020944
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01-DEC-2000;
20-DEC-2000;
20-DEC-2000;
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02-MAR-2000;
15-MAR-2000;
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08-NOV-2000
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28-FEB-2001
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The invention relates to isolated human PRO polypeptides (secreted and transmembrane polypeptides) and the polynucleotides encoding them. The invention also relates to an antibody which specifically binds to a PRO polypeptide, a method for stimulating the release of tumour necrosis factor-alpha (TNF-alpha) from human blood, a method for stimulating the presence of a tumour in a mammal (e.g. adrenal, lung, certoral and a method for detecting the presence of a tumour in a mammal (e.g. adrenal, lung, corporation or differentiation of chondrocyte cells and a method for proliferation probes, in Chromosome and gene mapping, in generating colon, breast, prostate, rectal, kidney, cervical and liver tumours). The polymucleotides are useful in molecular biology, including uses as hypridisation probes, in Chromosome and gene mapping, in generating a their transgenic animals or knock-out animals which are a training either transgenic animals or knock-out animals which are useful in the development and socreming of therapeutically useful cagents. The PRO polypeptides or antibodies are used in preparing a tumours, for stimulating of herapeutically useful cagents. The PRO polypeptides or antibodies are used in preparing a tumours, for stimulating and inhibiting proliferation of thuman microvascular endothalial cells, for modulating the uptake of glucose or PRA by skeletal mussle cells or adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating differentiation of adipocyte cells, for stimulating and condition such an analyze the proliferation of an expression in pericyte cells, for stimulating cells or traiting each or finner ear utricular supporting cells, for stimulating the proliferation of finner ear utricular supporting cells, for stimulating and cartilage are useful for treating sports. For pulpaptides are lasto useful for treating various mammalian hammed cartilage are useful for treating various mammalian hammed local immune system cell infilteration. This sequence represents a human PRO pol 3 Gaps Gao Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, G: Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z; ö Query Match
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0; Novel secreted and transmembrane polypeptides, PRO useful for t bone disorders, arthritis, heart attack, injuries, tumors, and stimulating release of TNF-alpha from human blood. Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; Claim 2; SEQ ID NO 375; 638pp; English 06-AUG-2001; 2001US-00924419. 09-AUG-2001; 2001US-00927796. 16-AUG-2001; 2001US-009316. 19-DEC-2001; 2001US-00028072. (GETH) GENENTECH INC. WPI; 2004-041356/04. P-PSDB; ADE88687. H à

240 9 9 181 CTTCACGGGGTGGCTGCTCTGTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC GITGIGICCTICAGCAAAACAGIGGAITITAAAICICCTIGCACAAGCITGAGAGCAACAC g ò 유

98WO-US021141. 98UG-U109304P. 98WG-US02485F. 98US-0113596F. 99WG-US000106. 99WO-US000106.

> 05-JAN-1999; 08-MAR-1999; 10-MAR-1999; 12-MAR-1999; 29-MAR-1999; 21-APR-1999; 26-APR-1999;

9908-012395789908-012677389908-013102289908-013102289908-013102389908-013955789908-014269089908-01426289908-01462289908-0146228-

99WO-US031243

28-JUL-1999; 29-OCT-1999; 30-NOV-1999; 02-DEC-1999; 02-DEC-1999;

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PR 11-VRX-1998 | 98103-00001079-PR 21 PR 21-VRX-1998 | 98103-00001079-PR 21 PR 21 VRX-1998 | 98103-00001079-PR 21 VRX-1998 | 98103-0001079-PR 21 VRX-1
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06 JAN 2000; 2000MO-US000275 06 JAN 2000; 2000MO-US000376 18 FEB 2000; 2000MO-US003565. 18 FEB 2000; 2000MO-US005651 24 FEB 2000; 2000MO-US005841 10 MAR 2000; 2000MO-US005841 11 MAY 2000; 2000MO-US005841 17 MAY 2000; 2000MO-US004395 18 JUL 2000; 2000MO-US014941 22 JANY 2000; 2000MO-US014941 24 JUL 2000; 2000MO-US014941 25 JUN 2000; 2000MO-US014941 26 JUN 2000; 2000MO-US01398 10 DEC 2000; 2000MO-US01398 10 DEC 2000; 2000MO-US013995 20 JUN 2001; 2001MO-US013678 21 JUN 2001; 2001MO-US019652 22 JAN 2001; 2001MO-US019652 23 JUN 2001; 2001MO-US019695 24 JUN 2001; 2001MO-US019695 25 JUN 2001; 2001MO-US019695 26 JUN 2001; 2001MO-US019695 27 JUN 2001; 2001MO-US019695

ASHKENAZI A J BAKER K P. BOTSTEIN D. DESNOYERS L. EATON D L. FERRARA N. FILVAROFF E. FONG S.

GODOWSKI

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(GIRM)

GURNEY A HILLAN K KLJAVIN KUO S S.

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                                                                                                                                                         GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCCATCATGATTTGGTCCAGGCGCCGT
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                                                   CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGAAAAGTGGAAAACTTT
                                                                                                    CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACACTTGCGT
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    ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA
                                                                                    CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT
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                              CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGAAAACAGACCTTT
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                                                                                                                                                      Length 1679;
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                                                                                                                                                   100.0%; Score 1679; DB 1;
larity 100.0%; Pred. No. 6.7e-05;
Conservative 0; Mismatches 0;
NAPIER M A.
PAN J.
PAONI N F.
SNOY M A.
SHELTON D L.
STEWARI T A.
TUMAS D.
WILLIAMS P M.
WOOD W I.
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Best Local Similarity
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gene therapy.
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The invention describes an isolated PRO (secreted and transmembrane)

CD polypeptide (1). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are
useful for stimulating the proliferation of or gene expression in

Useful for stimulating the proliferation or of gene expression in

EC stimulating the proliferation or differentiation of chondrocyte

CC calls. PRO31, PRO357, PRO1357, PRO1352, PRO1196, PRO1419, PRO1419,

Alpha from human blood. PRO9125, PRO1525, PRO1306, PRO1419,

Alpha from human blood. PRO9127, PRO1727, PRO1306, PRO1419,

PRO127, PRO137, PRO126, PRO1186, PRO1187, PRO1719, PRO1411, PRO1411,

CC PRO1478, PRO1314, PRO1266, PRO1069, PRO1071, PRO1411, PRO1411,

CRO1286, PRO1314, PRO1266, PRO1306, PRO1071, PRO1411, PRO1411,

CRO1286, PRO1314, PRO1266, PRO1136, PRO1409, PRO1414, PRO1412,

CRO1887, PRO1328, PRO1414, PRO1816, PRO1433, PRO1444, PRO1437,

CRO1887, PRO1328, PRO1434, PRO1406, PRO1433, PRO1444, PRO1437,

CRO1887, PRO1328, PRO1434, PRO1406, PRO1433, PRO1444, PRO1437,

CRO1887, PRO1328, PRO1444, PRO1434, PRO1434, PRO1434, PRO1434,

CRO1887, PRO1328, PRO1444, Or PRO14034, PRO1434, PRO1434,

CRO1887, PRO1887, PRO11864, PRO1434, PRO1434, PRO1434,

CRO1887, PRO1887, PRO11864, PRO1448, PRO1434, PRO1434,

CRO1887, PRO1488, PRO1444, Or PRO1488, PRO1488, PRO4432, PRO1488,

CRO1887, PRO1887, PRO1488, PRO1484, PRO1488, PRO4432,

CRO1887, PRO1887, PRO11844, Or PRO7425, PO14984, PRO1434, PRO1488,

CRO1887, PRO1887, PRO11844, Or PRO7425, PRO1488, PRO4433, PRO1484,

CRO1887, PRO1887, PRO11844, Or PRO7425, PRO1488, PRO4432, PRO1488,

CRO1887, PRO1887, PRO11844, Or PRO7425, PRO1488, PRO4432,

CRO1887, PRO1184, Or PRO7425, PRO1488, PRO4432,

CRO1887, PRO1887, PRO1887, PRO1488, PRO4432,

CRO1888, PRO11887, PRO1887, PRO1888, PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New secreted and transmembrane PRO polypeptides and nucleic acids, useful in gene therapy, or for preparing a medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gerritsen ME, Goddard A, Godowski PJ;
Smith V, Stephan JF, Watanabe CK, Wood WI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 2; SEQ ID NO 125; 308pp; English.
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29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
                                                                                                                                                                                                                                                                                28-AUG-2002; 2002US-00230113
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P-PSDB; ADD77607.
                                                                                             US2003100729-A1.
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Grimaldi JC,
Homo sapiens
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Query Match
100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;
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1020 360 360 540 840 180 180 240 300 420 420 480 600 99 720 720 780 780 900 900 241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCTCAG 301 GIGCACTATICACACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 841 ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTTGGGCAAT 181 CTTCACGGGCTGCTCTCTGTCTCTTCCAAGAAGTGCCCGTGCGCAGAGAATGC 241 CACCTICCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCCACCCTCAG GTGCACTATTGACAACCGGGGTCACCCGGGTGGCCTGGCTAAAACCGCAGCACCATCCTCTA TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC 361 TCCTGGGAATGACAAGTGGTGCTGGATCCTCGCGTGGTCCTTCTCAAGCAACAACCAAAG 421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 481 GGTGCAGACAGACAACCACCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCCCCAAAGC CTGCATAGCAACTGGTAGACCAGAGCCTACGTTACTTGGAGACACATCTCTCCCCAAAGC 661 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC **AGGGGACTACGAGTGCAGTGCCTCCAATGACGTGGCGGCGCCGTGGTACGGAGAGTAAA** GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 781 GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG ACAAAAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA 901 CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGGTGAAAGTGGAAAACAGACCTTT 901 CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGGGGTGAAAGTGGAAAAACAGACCTTT 961 CCTCTCAAAACTCATCTTCAATGTCTCTGAACATGACTATGGGGAACTACACTTGCGT 1081 CAGCGAGGTGAGCAACGGCACGTCGAGGAGGCAGGCTGCGTCTGGCTGCTGCTGCTCTTCT 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT CTTCACGGGGCTGGCTGCTCTGTGTTCTTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC GGTGCAGACAGACCACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 961 CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACATGCGT GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT 1021 GGCCTCCAACAAGCTGGGCCACACAATGCCAGCATCATGTTGTTTTGGTCCAGGCGGTT 181 541 109 781 841 541 721 361 601 61 301 181 661 g ò 유 g ઠે g ઠે d 셤 ઠે 셤 ò 셤 셤 ઠે 유 Ś g 8 8 8 8 à 셤 à 셤 8 8 셤 ò à 엄 ò ò ò ò

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human; secreted and transmembrane protein; PRO; gene; se; cytostatic; vulnerary; antiarthritic; pericyte cell proliferation; pericyte cell differentiation; chondrocyte cell proliferation; chondrocyte cell differentiation; tumour necrosis factor alpha release; (TNF) alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell differentiation inhibitor; tumour; lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour; liver tumour; tissue typing; chromosome mapping; gene mapping;
                                                                                                   Novel human secreted and transmembrane protein PRO337 cDNA.
                        ADD77852 standard; cDNA; 1679 BP
                                                                          (first entry)
                                                                            29-JAN-2004
                                                   ADD77852;
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01-JUN-2001; 2001WO-US017800. 29-JUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480. 28-AUG-2002; 2002US-00230183 (GETH) GENENTECH INC JS2003100730-A1. Homo sapiens 29-MAY-2003.

Wood WI; Watanabe CK, Stephan JF, Smith V, Ā, Gurney WPI; 2004-008980/01. P-PSDB; ADD77853. ďĊ, Grimaldi

New secreted and transmembrane PRO polypeptides and nucleic acids, useful in gene therapy, or for preparing a medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g. cancer.

claim 2; SEQ ID NO 125; 308pp; English.

The invention describes an isolated PRO (secreted and transmembrans)

CC polypeptide (1) PRO982, PRO1180, PRO1187 or PRO11829 polypeptide are useful for stimulating the proliferation of or gene expression in periotyte cells. PRO982, PRO1272 or PRO4405 polypeptide are useful for stimulating the proliferation of differentiation of chondrocyte cells. PRO387, PRO725, PRO1185, PRO1180, PRO1181, PRO1180, PRO1181, PRO1180, PRO1181, PRO118

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

Ö 0; Gaps Query Match 100.0%; Score 1679; DB 1; Length 1679; Best Local Similarity 100.0%; Pred. No. 6.7e-05; Matches 1679; Conservative 0; Mismatches 0; Indels 0;

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Godowski PJ;

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Qy 1381 TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGA Db 1381 TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGA CD 1441 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAG CD 1441 CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAG CO 1501 TCTGCCCACAGAGTGCCCCCACGTGGAACCTCTTTGGTGCCAG CO 1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGC CO 1501 TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAACC CO 1561 HIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	1621 SULT 160 DB5310 ADD85310; ADD85310; 29-JAN-2C	Novel human secreted and transmembrane protein P XX KW human; secreted and transmembrane protein; PRO; W vulnerary; antiarthitic; pericyte cell prolifer KW pericyte cell differentiation; chondrocyte cell KM chondrocyte cell differentiation; tumour necrosi KM (TNP)-alpha release; dermal fibroblast cell prol KM dermal fibroblast cell differentiation inhibitor KM dermal; tissue typing; chromosome mapping; KW gene therapy.	M US2003100725-A1. X US2003100725-A1. Z 29-MAY-2003. Y 26-AUG-2002; 2002US-00227876. X 15-SEP-2000; 2000US-0232887P. R 01-UUN-2001; 2001WO-US017800.	29-JUN-2001; 09-APR-2002; (GETH) GENE Baker KP, D Grimaldi JC, WPI; 2004-00	New secreted and transmembrane PRO polypeptide up PT medicament for treating a condition that is respective up polypeptide or anti-PRO antibody, e.g. cancer. XX Caim 2; SEQ ID NO 125; 308pp; English. CC The invention describes an isolated PRO (secrete CC polypeptide (I). PRO982, PRO1160, PRO1187 or PRO CC useful for stimulating the proliferation of or gc pericyte cells. PRO357, PRO229, PRO1272 or PRO44 CC for stimulating the proliferation of or growth and proliferation or differentia
3 3 3 4 4 4 2 3 0 0 9 5 4 4 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CTGCAIAGCATTTCTTCAGATATCTCCATTAATGAAGGAACAATATTAGCCTCAC 600 CTGCAIAGCAACACTGGTACACCAGGGTACATTATGAAGGAACAATATTAGCCTCAC 600 CTGCAIAGCAACTGGTAGACCAGAGCCTACGGTTACTTGAGACACATCTCTCCCAAAGC 660 CTGCATAGCAACTGGTAGACCAAGGCTACGGTTACTTGAGACACATCTCTCCCAAAGC 660 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 720 GGTTGGCTTTGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 720	721 AGGGACTACGAGGCGCCCCAATGACGTGGCCGCGCCCGTGGTACGAGAGTAAA 780	CAAGGATGACAAAAGACTGATTGAAGGAAAGGAGAAAGTGGAAAACAGACCTTT 960 CAAGGATGACAAAGACTGATTGAAGGAAAGAAGGGTGAAAGTGGAAAACAGACCTTT 960 CAAGGATGACAAAGACTGATTGAAGGAAAGAAGGGGTGAAACTGGAACTTTCTTCAATGATGACTTGAGAATGAGAACTACACTTGCGT 1020 CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACACTTGCGT 1020 CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGAGAACTACACTTGCGT 1020 GGCCTCCAAAACTCATCTTCTTCAATGTCTCTGAACATGAGAACTACGGT 1080	CAGCACCTCCAACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCGT	1320 1320 1380
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d A, Godowski PJ; ', Watanabe CK, Wood WI;

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invention describes an isolated PRO (secreted and transmembrane)
Apeptide (I). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are
ful for stimulating the proliferation of or gene expression in
icyte cells. PRO357, PRO229, PRO1272 or PRO4405 polypeptide are
stimulating the proliferation or differentiation of chondrocyte for

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cells. PRO231, PRO357, PRO725, PRO1155, PRO1306 or PRO1419 polypeptide are useful for stimulating the release of tumour necrosis factor (NNF)-crops and the from human blood. PRO363, PRO531, PRO1635, PRO1606, PRO1191, PRO137, PRO526, PRO363, PRO531, PRO1603, PRO6060, PRO1606, PRO1192, PRO1606, PRO1191, PRO1131, PRO1131, PRO1134, PRO1134, PRO1134, PRO1134, PRO1136, PRO1136, PRO1136, PRO1192, PRO1279, PRO1340, PRO1132, PRO1343, PRO1340, PRO1341, PRO1340, PRO1340, PRO1341, PRO134, PRO1341, PRO1341
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Seguence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;	.Match 100.0%; Score 1679; DB 1; Length 1679; Local Similarity 100.0%; Pred. No. 6.7e-05; es 1679; Conservative 0; Mismatches 0; Indels 0; Gaps	1 GTIGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAACACA	1 GITGIGICCTICAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAAGCAACAC	61 PATCTATCAGGAAAGAAAGAAAAAAAAAAACCGAACCTGACAAAAAAGAAGAAAAAGAAGAAAGA	61 AATCTATCAGGAAAGAAAGAAAAAAAAAAACCGAACCTGACAAAAAAGAAAG	121 AAGAAAAAAAACATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGCAAT	121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACATTCTATCTCTTGGGCAAT	181 CITCACGGGCTGGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGAAGATGC	181 CTTCACGGGGCTGGCTGTCTCTTCTTCTAGGAGTGCCCGTGCGCAGGGGAGATGC	241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAGAGCGCCACCCTCAG	241 CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGGAGAGCGCCACCTCAG	301 GIGCACIAITGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA	301 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTTA	361 IGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCACACAAAC	361 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAC	421 GCAGTACAGCATCGAGATCCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC	421 GCAGIACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC	481 GGTGCAGACAGCACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC	481 GGTGCAGACAGACAACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polymucleotides encoding them.

The PRO polypeptides and polymucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for diagnostics, biosensors or bioreactors. They are particularly useful for diagnostics, biosensors or bioreactors. They are particularly useful for construct tumour, rectal tumour or liver tumour, breast tumour, rectal tumour or liver tumour) in a mammal, for stimulating the proliferation of the proliferation of chondrocyte cells, for stimulating the proliferation of chondrocyte cells, for stimulating the proliferation of chondrocyte cells for stimulating the proliferation of chondrocyte cells for stimulating the proliferation of chondrocyte cells or for stimulating the proliferation of chondrocyte cells in chromosome and gene mapping, in generating franspania properious by recombinant tendency and part of the cells of the properious of the proliferation of the cells of the properious of the properious of the condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and bone and/or cartilage differentiation of chondrocytes. The PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and bone and/or cartilage differentiation of chondrocytes. The PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and bone and/or cartilage condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and bone and/or cartilage condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as pericyte-associated tumours and sore represents a mammal PRO polypeptides are useful as molecular markers for protein electrophoresis, and in tissue typing. This sequence expresents a buman PRO polyperion of the invention. Note: The sequence data for this patent is also available in electronic format
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                                                                                                                                                                                                                                                                                                                                                                                          Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide; tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bone disorder; cartilage disorder; arthritis; sports injury; cytostatic; antiarthritic.
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Smith V, Stephan JF, Watanabe CK, Wood
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                                                                                                                                                                           ADD73842 standard; cDNA; 1679
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15-SEP-2000; 2000US-0232887P.
01-JUN-2001; 2001WO-US017800.
29-JUN-2001; 2001WO-US021066.
09-APR-2002; 2002US-00119480.
                                                                                                                                                                                                                                                                                                                                             Human PRO polynucleotide #63.
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Grimaldi J
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                                                                                                                                 1 GITGIGICCTICAGCAAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGAAACAC
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                                          Length 1679;
Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;
                                                                                         Indels
                                          Score 1679; DB 1;
Pred. No. 6.7e-05;
); Mismatches 0;
                         100.0%; Scc. 100.0%; Pred. No. c. ... 0; Mismatches
                                                                    Best Local Similarity 100.
Matches 1679; Conservative
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Best Local Similarity
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                                                                  JC,
                                                         Baker KP,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide; tumour; cancer; lung; colon; breast; prostate; rectum; liver; tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; pericyte cell; dermal fibroblast; bene disorder; cartilage disorder; arthitis; sports injury; oytostatic; antiarthritic.
CCTCTCAAAACTCATCTTCTTCAATGTCTCTGAACATGACTATGGGAACTACGCGT
                                                                            GGTCTTGCACCCTGCTTCTCAAATTTTTGATGTGAGTGCCACTTCCCCACCCGGGAAAGGCT
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                             GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT
                                                                  CAGCGAGGTGAGCAACGCCACGTCGAGGAGGCCAGGCTGCGTCTGGCTGCCTCCTTCT
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The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polymucleotides encoding them.
The PRO polypeptides and polymucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. They are particularly useful for detecting tumours (e.g. lung tumour, colon tumour, breast tumour, condition, rectal tumour or liver tumour) in amammal, for prostate tumour, rectal tumour or liver tumour) in amammal, for stimulating the proliferation of for gene conditions to stimulating the proliferation of or gene expression in perioyte cells or for stimulating the proliferation of or gene expression in perioyte cells or for stimulating the proliferation of or gene expression in periops. The PRO nucleic acids are useful as hybridiation probes, in chromosome and gene mapping, in generating transgenic animals or knock-out animals which may be used in the development and screening of therappentically useful cragents, in gene therapy, in chromosome identification, as chromosome markers and in generating probes. The PRO polypeptides or anti-PRO markers and in generating probes. The PRO polypeptides or anti-PRO antibodies, such as perioyte-associated tumours and bone and/or cartilage disorders (e.g. arthritis, sports injuries), involving inducting the recondition which is responsive to the PRO polypeptides are useful as molecular markers for protein electrophoresis, and in tissue typing. This sequence represents a human PRO polymological provention. Note:

The sequence data for this patent can also be obtained in electronic format directly from USPTO at sequence. Once the condition which is responsive to the sequence of the invention.
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                                                                         Goddard A, Godowski PJ;
shan JF, Watanabe CK, Wood
                                                                                                                                                                                                                                                                                                           preparing
the PRO
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                                                                                                                                                                                                                                                                                                   New secreted and transmembrane PRO polypeptide useful for medicament for treating a condition that is responsive to polypeptide or anti-PRO antibody, e.g. cancer.
                                                                         Gerritsen ME, Goddard
Smith V, Stephan JF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 2; Fig 125; 308pp; English.
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                                                                         Desnoyers L,
(GETH ) GENENTECH INC.
                                                                                                                                                                                            WPI; 2004-008963/01.
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1411 CCCACTGCAAGCTGCAACCTCTTTGGTGCCAGTGTGGCCAAGGGCTCAGCCTC 1500	ADD77108 ID ADD77108 XX AD77108; XX AD77108; XX XX XX AD77108; XX XX XX XX XX XX XX XX XX	Homo sapiens. US2003100716-A1. 29-MAY-2003. 13-AUG-2002; 2002US-00219077. 01-UUN-2001; 2001WO-US017800. 29-UUN-2001; 2001WO-US021066. 09-APR-2002; 2002US-00119480. (GETH) GENENTECH INC. Baker KD, Desnoyers L, Gerritsen ME, Goddwski PJ; Grimaldi JC, Gurney AL, Smith V, Stephan JF, Watanabe CK, Wood WI; P-PSDB; ADD77109.	New secreted and transmembrane PRO polypeptides and nucleic acids, useful in gene therapy, or for preparing a medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g. cancer. Claim 2, SEQ ID NO 125; 308pp; English. The invention describes an isolated PRO (secreted and transmembrane) polypeptide (I). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are useful for stimulating the proliferation of or gene expression in pericyte cells. PRO357, PRO229, PRO1272 or PRO4405 polypeptide are useful for stimulating the proliferation of differentiation of chondrocyte cells. PRO351, PRO357, PRO125, PRO1156, PRO1160, or PRO1419, polypeptide are useful for stimulating the release of tumour necrosis factor (TNF) alpha from human blood. PRO982, PRO357, PRO725, PRO1306, PRO1419, PRO214,
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301 GTGCACTATTGACAACCGGGTCACCCGGGTGGCTAAACCGCAGCACCATCCTCTA 360 361 TGCTGGGAATGACAAGTGGTGCTGGATCCTCGGGTGCTCTTCTGAGCAACACCCAAAC 420 361 TGCTGGGAATGACAAGTGGTGCTGGATCCTCGGGTGCTTCTGAGCAACACCCAAAC 420 421 GCAGTACAGCATCCAAAGTGCTGGATCTGTATGACGAGGCCCTTACACCTGCTC 480 421 GCAGTACAGCATCCAAACATGTGTATTGACGAGGGCCCTTACACCTGCTC 480 481 GCTGCAACACACACACAAAGACCTCTAAGGGTCCACTCATTGTGCAAGTATCTCC 540 481 GGTGCAACACACACACACAAGACCTCTAAGGGTCCACTTATGTGCAAGTATCTCC 540 541 CAAAATTGTAAGAATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 600 11111111111111111111111111111111111	601 CTGCATAGCAACTGGTAGACCAGAGCCTTACGGTAGAGACACATCTCTCCCCAAAGC 660 601 CTGCATAGCAACTGGTAGACCAGAGCCTTACGGTTACTTGGAGACACATCTCTCCCCAAAGC 660 601 CTGCATAGCAACTGGTAGACCAAGACCTACGGTTACTTGGAACACATCTCTCCCCAAAGC 660 601 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCGGGAGCAGTC 720 601 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCGGGAGCAGTC 720 721 AGGGCACTACGAGTGCATGCCTCCAATGACTTGGAAATTCAGGGCATCACCGGGAGAGTAAA 780 721 AGGGCACTACGAGTGCATCCACCAATGACTGGCGGCCCGTGGTTGTTTTTTAGAAGCGCGCCCGTGGGTTTTTTTT	901 CAAGGATGACAAAAGAAAGGAAAGAAAGGAGGGTGAAAAGTGGAAAACAGACCTTT 960 901 CAAGGATGACAAAAGACTGATTGAAGGAAAAGAAAGGAAAAGAAAG	1201 GCCGCCACCACCACCACCACCACACAATGGCAACCACACACCAACCA

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CC PRO247, PRO337, PRO526, PRO363, PRO631, PRO1083, PRO1011, PRO1114, PRO1134, PRO1144, PRO126, PRO1186, PRO1187, PRO1186, PRO1187, PRO118

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

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CTTCACGGGGCTGGTGCTCTGTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGAGTGC 240 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGGACCATCCTCTA 360 CACCTTCCCCAAAGCTATGGACAACGTCAGGGTCCGGCAGGGGAGAGCGCCACCTCAG 300 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT Gaps ö Query Match
Best Local Similarity 100.0%; Score 1679; DB 1; Length 1679;
Best Local Similarity 100.0%; Pred. No. 6.7e-05;
Matches 1679; Conservative 0; Mismatches 0; Indels 0;

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TITAGGTACAATGGAGITITICITITCCCAAA.CGGGAAGAACA.CAGCACACCCGGCTTGGA TITAGGTACAATGGAGTTTTCTTTTCCCAAAGGGAAGAAGAACAACAGCACACCCGGTTTGGA CCCACTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGGCAAGGGCTCAGCCTC ACAAAAGGGGACACTGCAGTGTAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGTA CAAGGATGACAAAAGACTGATTGAAGGAAAGAAAGAAAGGGGTGAAAGTGGAAAAGAAACHTT GGCCTCCAACAAGCTGGGCCACACCATGCCAGCATGTTGTTTGGTCCAGGCGCGTT GCCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGGCGCGT CAGCGAGGTGAGCAACGCCACGTCGAGGAGGCAGGCTGCGTCTGGCTGCTGCTTCT CAAGGATGACAAAAGACTGAATGAAGGAAAGAAAGGGGTGAAAAGTGGAAAACAGACCTTT GGTTGGCTTTGTGAGGGGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC AGGGGACTACGAGTGCCTCCAATGACGTGGCCGCCCCCGTGGTACGGAGAGTAAA 요 양 원 6 6 6 8 6 8 8 8 8 6 8 6 g

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Claim 2; SEQ ID NO 125; 308pp; English.
         ADD85802 standard; cDNA; 1679
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01-5ERP-1999, 99WO-US020111.
01-JUN-2001, 2001WO-US017800.
29-JUN-2001, 2001WO-US021066.
09-APR-2002, 2002US-00119480.
                                                                                                                            14-AUG-2002; 2002US-00219471
                            29-JAN-2004 (first entry)
                                                                                                                                                                            Desnoyers L,
C, Gurney AL,
                                                                                                                                                                  (GETH ) GENENTECH INC
                                                                                                                                                                                          WPI; 2004-008970/01
                                                                                                                                                                                               P-PSDB; ADD85803.
                                                                                                         US2003100720-A1.
                                                                                                                                                                           Baker KP, Dee
Grimaldi JC,
                                                                                                Homo sapiens
                                                                                                                  29-MAY-2003
                   ADD85802;
RESULT 164
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Query Match
Best Local Similarity 100.
Matches 1679; Conservative
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Complypeptide (1). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are

Complypeptide (1). PRO982, PRO1160, PRO1187 or PRO1329 polypeptide are

Complypeptide (1). PRO357, PRO1252, PRO1272 or PRO4405 polypeptide are useful

Comply PRO231, PRO357, PRO1252, PRO1155, PRO1306 or PRO1419 polypeptide

are useful for stimulating the proliferation or differentiation of chondrocyte

alpha from human blood. PRO982, PRO1557, PRO1306, PRO1419, PRO1419,

COMPANY PRO1313, PRO1256, PRO353, PRO351, PRO1306, PRO1419, PRO1419,

COMPANY PRO1314, PRO826, PRO1005, PRO1192, PRO1244, PRO13109,

COMPANY PRO1319, PRO1367, PRO1305, PRO1192, PRO1244, PRO1311, PRO13139,

COMPANY PRO1330, PRO1306, PRO1306, PRO1194, PRO1311, PRO13139,

COMPANY PRO1306, PRO1307, PRO1306, PRO1406, PRO1314, PR
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Smith V, Stephan JF, Watanabe CK, Wood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New secreted and transmembrane PRO polypeptide useful for preparing medicament for treating a condition that is responsive to the PRO polypeptide or anti-PRO antibody, e.g. cancer.
                                                                                                                                                                                                                                                                                                                      human; secreted and transmembrane protein; PRO; gene; 88; cytos vulnerary; antiarthritic; pericyte cell proliferation; pericyte cell proliferation; chondrocyte cell differentiation; chondrocyte cell differentiation; tumour necrosis factor alpha (TNF)-alpha release; dermal fibroblast cell proliferation; dermal fibroblast cell proliferation; colon tumour; tumour in the colon tumour; tumour; lung colon tumour; breast tumour; prostate tumour; rectal tumour; gene mapping; gene mapping;
                                                                                                                                                                                                                                                                   Novel human secreted and transmembrane protein PRO337
                                                                                          ВР.
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ö the PRO polypeptides in the test sample as compared to the control sample is indicative of the presence of tumour in the mammal. The tumour is lung tumour, colon tumour, colon tumour, prostate tumour, rectal tumour or liver tumour. (I) is useful as molecular weight markers, for tissue typing, or as therapeutic agents. A polymuclectide (II) encoding (I) is useful for chromosome and gene mapping or gene therapy. (II) is useful for generating transgenic animals or knock-out animals which are useful screening useful reagents. PRO259, PRO1272 or PRO4405 polypeptide is useful for treating bone and/or cartilage disorders (e.g., arthritis, PRO 2011) and transmembrane and transmembrane 240 540 120 120 180 240 300 360 360 420 420 480 480 600 600 999 99 720 720 780 780 840 9 60 61 AATCTATCAGGAAAGAAAGAAAAAAAAAACCGAACCTGACAAAAAAAGAAGAAAAAGA 121 AAGAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT 241 CACCTTCCCCAAAGCTATGGACAACGTGACGTCCGGCAGGGGGAGAGCGCCACCTCAG CACCTICCCCAAAGCTATGGACAACGTGAGGTCCGGCAGGGGGGAGAGAGCCCACCTCAG 301 GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 361 TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCCAAAC 481 GGTGCAGACAGACAACCACCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 541 CAAAATTGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCCAAAGC 661 GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGGATCACCCGGGAGCAGTC 1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGGCAACAC 1 GITGIGICCTICAGCAAAACAGIGGATTTAAATCTCCTIGCACAAGCTTGAGAGCAACAC 121 AAGAAAAAAATCATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTTGGGCAAT GTGCACTATTGACAACCGGGTCACCCGGGTGGCCTGGCTAAACCGCAGCACCATCCTCTA 421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGATGACGAGGGCCCTTACACCTGCTC GGTGCAGACAGACCACCCCAAAGACCTCTAGGGTCCACCTCATTGTGCAAGTATCTCC **CAAAATTGTAGAGATTTCTTCAGATATCTCCCATTAATGAAGGGAACAATATTAGCCTCAC** CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC AGGGGACTACGAGTGCCTCCAATGACGTGGCCGCGCCCGTGGTACGGAGTAAA GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG CTTCACGGGGCTGGCTGTGTGTCTTCTTCCAAGGAGTGCCCGTGCGCAGCAGCAGATGC TGCTGGGAATGACAAGTGGTGCCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCAAAC 721 Aggegactacgagtgcagggcctccaatgacgtggccgccgcccgrgtacggagagtaaa ; 100.0%; Score 1679; DB 1; Length 1679; 100.0%; Pred. No. 6.7e-05; ive 0; Mismatches 0; Indels 0; Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other; 721 781 5 8 5 Ω 5 A ò

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Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide;
tumour; cancer; lung; colon; breast; prostate; rectum; liver;
tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell;
pericyte cell; dermal fibroblast; bone disorder; cartilage disorder;
arthritis; sports injury; cytostatic; antiarthritic.
                                                                                                                      Human PRO polynucleotide #63.
                                                                                      (first entry)
                                                                                      29-JAN-2004
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The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polymucleocides encoding them.

CC transmembrane polypeptides and the PRO polymucleocides encoding them.

Cd diagnostics, blosensors or bioreactors. They are particularly useful for detecting tumour, rectal tumour or liver tumour, in a mammal, for prostate tumour, rectal tumour or liver tumour) in a mammal, for cstimulating the release of tumour necrosis factor (TNF) alpha from human blood, for stimulating the proliferation of or gene conditoryte cells, for stimulating the proliferation of or gene expression in perioyte cells or for stimulating the proliferation of or gene captures; in chromosome and gene mapping, in generating or the PRO nucleic acids are useful as the development and screening of therappeutically useful cells and used in the development and screening of therappeutically useful captures and in generating probes. The PRO polypeptides, or anti-PRO markers and in generating probes. The PRO polypeptides or anti-PRO antibodies, are useful for preparing a medicament for treating or condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as perioyre-associated tumours and bone and/or cartilage condition which is responsive to the PRO polypeptides or anti-PRO antibodies, such as perioyre-associated tumours and bone and/or cartilage disorders (e.g. arthritis, sports injuries), involving inducing the re-disorder electrophoresis, and in tissue typing. This equence represents a human PRO polypeptide of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            secreted and transmembrane PRO polypeptides and nucleic acids, useful gene therapy, or for preparing a medicament for treating a condition
                                                                                                                                                                                                                                                                                                                                        PJ;
Wood WI;
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that is responsive to the PRO polypeptide or anti-PRO antibody, e.g.
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Smith V, Stephan JF, Watanabe CK,
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100.0%; Pred. No. 6.7e-05;
ive 0; Mismatches 0;
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01-JUN-2001; 2001WO-US017800.
29-JUN-2001; 2001WO-US01066.
09-APR-2002; 2002US-00119480.
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Grimaldi JC, Gurney AL,
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                                                              US2003100723-A1
                    Homo sapiens
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detecting tunnours (e.g. lung tunnour, colon tunnour, breast tunnour, cetal tunnour or liver tunnour) in a mammal, for prostate tunnour or liver tunnour) in a mammal, for stimulating the release of tunnour necrosis factor (TNP)-alpha from human blood, for stimulating the proliferation of chondrocyte cells, for stimulating the proliferation of or gene capression in perioyre cells or for stimulating the proliferation of or gene correction probes, in chromosome and gene mapping, in generating chybridisation probes, in chromosome and gene mapping, in generating correction, and condition which is preparing PRO polypeptides by recombinant technology, in generating probes. The PRO polypeptides, or anti-PRO may be used in the development and screening of therapeutically useful creagents, in gene therapy, in chromosome identification, as chromosome markers and in generating probes. The PRO polypeptides, or anti-PRO antibodies, are useful for preparing a medicament for treating a condition which is responsive to the PRO polypeptides or anti-PRO differentiation of chondrocytes. The PRO polypeptides are useful as condition which is responsive to the PRO polypeptides are useful as disferentiation of chondrocytes. The PRO polypeptides are useful as conditional markers for protein electrophoresis, and in tissue typing. This sequence represents a human PRO polymoclectide of the invention. Once: The sequence data for this patent can also be obtained in electronic format directly from USPTO at seqdata.uspto.goc/sequence.html. %%GGGGGGGGGGGGGGGGGGGG

Sequence 1679 BP; 498 A; 432 C; 419 G; 330 T; 0 U; 0 Other;

	1679; DB
Best Local Matches 16	Similarity 100.0%; Pred. No. 6.7e-05; 79; Conservative 0; Mismatches 0;
λõ	1 GTTGTGTCCTTCAGCAAAACAGTGGATTTAAATCTCCTTGCACAAGCTTGAGAGCAACAC 60
qq	1 GTTGTGTCCTTCAGCAAACAGTGGATTTAAATCTCCTTGCACAAGGTTGAGAGGAACAC 60
či	61 AATCTATCAGGAAAGAAAGAAAGAAAAAACGAACCTGACAAAAAAAA
đ	61 AATCTATCAGGAAAGAAAGAAAGAAAAAACCGAACCTGACAAAAAAAGAAGAAGAAG 120
æ	121 AAGAAAAAAACATGAAAACCATCCAGCCAAAAATGCACAATTCTATCTTGGGAAAT 180
ପୁ	121 AAGAAAAAATCTTGGAAAACCTTCCAGCCAAAAATGCACAATTCTATCTCTTGGGCAAT 180
8	181 CTTCACGGGGCTGCTCTGTGTCTCTTCCAAGGAGTGCCCGTGCGCAGCGGAGATGC 240
QQ	181 CTTCACGGGGCTGCTGTGTTTTTTCCAAGGAGTGCCCGTGCGCAGGAGATGC 240
ò	241 CACCTTCCCCAAAGCTATGGACAACGTGACGGCAGGGCAGGGGGGGCGCCACCCTCAG 300
qq	241 CACCTTCCCCAAAGCTATGGACATGGTGGTGCCGGCAGGGGGAGGGCGCCCCCTCAG 300
ŏ	301 GTGCACTATTGACAACCGGGGTCACCGGGGTGGCTAAACCGCAGCACCATCTTA 360
qu	301 GTGCACTATTGACAACCGGGTCACCGGGTGGCCTGGCTAAACCGCACCACCTCTA 360
ò	361 TGCTGGGAATGACAAGTGGTGCCTGGATCCTGGGTGGTCCTTCTGAGCAACACCCCAAAC 420
qa	361 TGCTGGGAATGACAAGTGGTGCTGGATCCTCGCGTGGTCCTTCTGAGCAACACCCAAAAA 420
ď	421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTATGACGAGGGCCCTTACACCTGCTC 480
op Q	421 GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC 480
ð	481 GGTGCAGACAGACCACCAAAGACTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 540
q	481 GGTGCAGACAGCAACCACCCAAAGAACTCTAGGGTCCACCTCATTGTGCAAGTATCTCC 540
8	541 CAAAATIGTAGAGATTICTICAGATATCTCCATTAATGAAGGAACAATATTAGCCTCAC 600
qq	541 CAAAAITGTAGAGATTTCTTCAGATATCTCCATTAATGAAGGGAACAATATTAGCCTCAC 600
č	601 CTGCATAGCAACTGGTAGACCAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 660
qq	601 CTGCATAGCAACTGGTAGAGCCTACGGTTACTTGGAGACACATCTCTCCCAAAGC 660

S S	661	GGTTGGCTTTGTGAGTGAAGACGAATACTTGGAAATTCAGGGCATCACCCGGGAGCAGTC 720
Qy	721	AGGGGACTACGAGTGCCCCCCAATGACGTGGCCGCGCCCGTGGTACGGAGAGTAAA 780
Qy Db	781	GGTCACCGTGAACTATCCACCATACATTTCAGAAGCCAAGGGTACAGGTGTCCCCGTGGG 840
ço qa	841	ACRARAGGGGACACTGCAGTGTGAAGCCTCAGCAGTCCCCTCAGCAGAATTCCAGTGGGTA 900
S G	901	CAAGGAIGACAAAAGACIGAIIGAAGGAAAGGAGGGGIGAAAGIGGAAAACAGACCTII 960
Qy . Db	961	CCTCTCAAAACTCATCTTCTAAATGTCTCTGAACATGACTATGGGAACTACGGT 1020
cy G	1021	GGCCTCCAACAAGCTGGGCCACCACCAAGCTACCTATTTGGTCCAGGCGCCGT 1080
දු පු	1081	CAGCGAGGTGAGCAACGCGACGTCGAGGAGGGCAGGCTGCGTCTGGCTGCTGCTTTCT 1140
e o	1141	GGTCTTGCACCTGCTTCTCAAATTTTGATGTGAGTGCCACTTCCCCACCGGGAAAGGCT 1200
8 S	1201	GCCGCCACCACCACCACCACACACAACAACAACAACAACA
ò qa	1261 1261	TATACAAATGAAATTAGAAGAACACAGCCTCATGGGACAGAAATTTGAGGGAGG
දු දු	1321	AAAGAATACTTTGGGGGGAAAAGAGTTTTAAAAAGAAATTGAAAATTGCCTTGCAGATA 1380
\chi \text{8}	1381	TTTAGGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACAGACACCCGGCTTGGA 1440
& 8	1441	
<u>ک</u> د	1501	TCTGCCCACAGAGTGCCCCCACGTGGAACATTCTGGAGCTGGCCATCCCAAATTCAATCA 1560
8 8	1561	GTCCATAGAGACAGAAATGAGACCTTCCGGCCCAAGCGTGGGGCTGCGGGCACTTTG 1620
qq	1561	GICCATAGAGACGAACAGAATGAGACCTICCGGCCCAAGCGTGGCGCGCGCGCGCACTTTG 1620
S a	1621	GTAGACTGTGCCACCACGGGGTGTGTTGTGAAACGTGAAATAAAAAGGGCAAAAAAA 1679
RESULT 16 AAZ47893 ID AAZ4 XX	167 3 .Z47893	Btandard; cDNA; 1693 BP.

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                                                                                               Human, haematopoietic cell regulation; tissue generation, reparation, activin; inhibin, taxis, chemotaxis; blood coagulation; thrombus; receptor; ligand; autoimmune; infection-related immunodeficiency; inflammatory disorder; neurological disease; ss.
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                                                                Human protein encoding cDNA SEQ ID NO:3
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GGTACAATGGAGTTTTCTTTTCCCAAACGGGAAGAACACACAGCACACCCGGCTTGGACCCA 1440
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                                                                                          ATAGAGACGAACAGAATGAGACCTTCCGGCCCAAGCGTGGCGCTGCGGGCACTTTGGTAG 1624
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SECX polypeptides and the nucleic acids that encode them, useful for diagnosing, preventing and treating e.g. cancers, inflammation, arthritis and immunological disorders.
                 CTGCAAGCTGCATCGTGCAACCTCTTTGGTGCCAGTGTGGGCAAAGGCTCACCCTCTG
                             CTGCAAGCTGCATCGTGCAAACCTCTTTGGTGCCAGTGTGGGCAAGGGCTCAGCCTCTCTG
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                                     Score 1643.4; DB 1;
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Matches 1644; Conservative
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                       <u> GGCCTCCAACAAGCTGGGCCACACCAATGCCAGCATCATGCTATTTGGTCCAGGCGCCGT</u>
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26-SEP-2001; 2001US-00965212.
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Fernandes ER, Vernet CAM, Shimkets RA, Anderson DW, Padigaru M; Boldog FL, Li L, Shenoy SG, Casman SJ, Rastelli L, Alsobrook JP; Burgess CB, Grosse WM, Gusev VY, Ji W, Lepley DM, Liu X, Mezick AJ; Patturajan M, Shen L, Spadena SK, Spytek KA, Szekeres ES; Taupier RJ, Tchernev VT, Zerhusen BD, Voss EZ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention relates to novel human nucleic acid sequences which encode novel molecule (MOL) proteins numbered MOL1-23, referred to generally in the specification as MOLX. Compounds which modulate the function of the MOLX proteins of the invention, MOLX agonists or antagonists, may have cardiant, antidiabetic or antiatratiosclerotic activities. In addition, the DNA and protein sequences disclosed may prove useful for gene therapy. The protein, nucleic acid or antibody is useful for gene composition for treating or preventing a MOLX-associated disorder, for example cardiomyopathy, diabetes or atherosclerosis. The present sequence is the DNA sequence encoding a MOL protein of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New MOLX polypeptide, nucleic acid or MOLX-specific antibody, useful preparing a composition for treating or preventing a MOLX-associated disorder, e.g., cardiomyopathy, diabetes or atherosclerosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2012 BP; 567 A; 503 C; 512 G; 430 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 8; SEQ ID NO 139; 371pp; English.
26-SEP-2001; 2001US-00966545.
26-SEP-2001; 2001US-00966546.
01-APR-2002; 2002US-036996F.
01-APR-2002; 2002US-036996F.
08-MAY-2002; 2002US-038437P.
07-UIN-2002; 2002US-038437P.
17-UUN-2002; 2002US-0386816F.
                                                                                                                                                                                                                                                                                                            (CURA-) CURAGEN CORP.
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P-PSDB; ADD18291.
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SECX polypeptides and the nucleic acids that encode them, useful for diagnosing, preventing and treating e.g. cancers, inflammation, arthritis and immunological disorders.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88.
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                                                                                                                                           GTAGACTGTGCCACCACGGCGTGTG 2012
                                                                                                               GIAGACTGTGCCACCACGCGTGTG 1645
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92. .1126
7*tag= a
92. .190
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                                                                                                                                                                                                                                                                                 standard; cDNA; 1603
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03-MAR-2000; 2000US-0186592P.
06-APR-2000; 2000US-00544511.
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GCAGTACAGCATCGAGATCCAGAACGTGGATGTGTATGACGAGGGCCCTTACACCTGCTC
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                                                                                                                                                                   This invention relates to novel human nucleic acid sequences which encode novel molecule (MOL) proteins numbered MOL1-23, referred to generally in the specification as MOLX. Compounds which modulate the function of the MOLX proteins of the invention, MOLX agonists or antagonists, may have cardiant, antidiabetic or antiatrerisoslerotic activities. In addition, the DNA and protein sequences disclosed may prove useful for gene therapy. The protein, nucleic acid or antibody is useful for gene therapy. The protein, nucleic acid or antibody is useful for preparing a composition for treating or preventing a MOLX-associated disorder, for example cardiomyopathy, diabetes or atherosclerosis. The present sequence is the DNA sequence encoding a MOL protein of the invention.
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Gusev VY, Ji W, Lepley DM, Liu X,
Spaderna SK, Spytek KA, Szekeres ES;
f, Zerhusen BD, Voss EZ;
                                                                                                                                                                                                                                                                                                                Sequence 1603 BP; 466 A; 422 C; 405 G; 310 T; 0 U; 0 Other;
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Pred. No. 0.00015;
0; Mismatches 1; Indels
                                                                                                                                            8; SEQ ID NO 137; 371pp; English.
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Best Local Similarity 99.9%;
Matches 1602; Conservative
Burgess CE, Grosse WM, G
Patturajan M, Shen L, Sp
Taupier RJ, Tchernev VT,
                                                   WPI; 2003-210304/20.
P-PSDB; ADD18289.
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           ggaaggtgggaaggtggaatggaaggggacacágaagtgccccgtgcchccdaagatgc
                                            CACCTTCCCCAAAGCTATGGACAACGTGACGGTCCGGCAGGGGGAAGAGCGCCACAG
                                                                           caccrrccccaaagcrargaacaacgreacgacgacgacgacgacgacgaccaccrcag
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                             Human, Kruppel associated DNA binding protein 42; gene; ss; cytostatic; virucide; immunomodulator; antiinflammatory; haemostatic; tumour; cancer; haemostathy; HIV infection; nervous system disease; developmental disease; hereditary disease; endocrine system disease; immune system disease; immunological disease; inflammation; human immunodeficiency virus.
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Pred. No. 0.00017;
0; Mismatches 2;
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DNA binding protein 42
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ilarity 93.1%;
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P-PSDB; AAU79205.
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The invention relates to human nucleic acids (AAIS7798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosupperseate and cyrostatic activity. The polymuclectides are useful in gene therapy. A composition containing a polypeptide or polymuclectide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral nervous injuries, peripheral nervous cost and system diseases, such as lateriable and central nervous system diseases, such as laterial sclerosis, and Shy-Drager Syndome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and C.N.S disorders. Note: The sequence data for this patent did not form part of the printed specification
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Matches 1457; Conservative 0; Mismatches
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irman T, Xu C, )
Drmanac RT;
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21-JAN-2000; 2000US-00488725.
25-AFR-2000; 2000US-00552317.
20-JUL-2000; 2000US-00598042.
19-JUL-2000; 2000US-00653450.
14-SEP-2000; 2000US-00663191.
19-OCT-2000; 2000US-00663191.
19-OCT-2000; 2000US-00693036.
29-NOV-2000; 2000US-00693036.
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Wang Z, Wehrman T,
Goodrich R, Drmanac
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Identifying a candidate p53 pathway modulators that are useful as targets for therapeutics or for diagnosing cancers associated with defective p53 function, by providing an assay system having a purified IG polypeptide or nucleic acid.
                                                                                                                                                                                                                                                                                      The invention relates to a novel method for identifying a candidate p53 apthway modulating agent. The method comprises providing an assay system having a purified IG polypeptide or nucleic acid or their functionally active fragment or derivative. The method is useful for identifying modulators of the p53 pathway, particularly for identifying agents for treating disorders (e.g. breast cancer, colon cancer, kidney cancer, lung cancer or cancer of the ovary) associated with defective p53 function. The identified modulators are useful as targets for novel therapeutics. The method is also useful for dispnosing disorders associated with defective p53 function. The IG proteins or nucleic acids are useful as modifiers of the p53 pathway, and as therapeutic targets for disorders associated with defective p53 function. This polynucleotide sequence represents a human nucleic acid relating to the human IG genes used in the assay for identifying modulators of the p53 pathway of the invention
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2001US-0328605P.
2001US-0338733P.
2002US-0357253P.
2002US-0357600P.
2002WO-US017313
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Best Local Similarity 98.5%;
Matches 1464; Conservative
                                                                                                                              Plowman GD,
                                                                                                      (EXEL-) EXELIXIS INC
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                     05-JUN-2001;
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The invention relates to a method for detecting a lung cancer-associated transcript in a cell from a patient, comprising contacting a biological sample from the patient with a polymucleotide that selectively hybridises to a sequence that is at least 80 % identical to a gene that exhibits increased or decreased expression in lung cancer samples. Lung cancer casciated polymucleotides and polymeptides are used for identifying a compound that modulates a lung cancer-associated polypeptide, for inhibiting proliferation of a lung cancer-associated cell to treat lung cancer in a patient and for treating a mammal having lung cancer by administering a modulatory compound identified. The methods are useful for treating a modulatory compound identified. The methods are useful cancer or other benign or precancerous lessions, e.g. atelectasis, emphysema, bronchitis, chronic obstructive pulmonary disease, fibrosis, hypersensitivity pneumonitis, interetitial pulmonary disease, fibrosis, bypersensitivity pneumonitis, interetitial pulmonary fibrosis, asthma and compounds that modulate lung cancer, such as antibodies. Sequences Lung cancer-associated polynucleotide, gene, ds, cytostatic, emphysema, antiinflammatory; antiasthmatic, non-small cell lung cancer, atelectasis, small cell lung cancer, benign lesion; precancerous lesion; bronchitis; chronic obstructive pulmonary disease; hypersensitivity pneumonitis; interstitial pulmonary fibrosis; fibrosis; asthma, bronchiectasis. Detecting a lung cancer-associated transcript in a cell from a patient for treating lung cancer, by contacting a biological sample from the patient with a polynucleotide that exhibits increased or decreased expression in lung cancer. 345 AGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAAGCTATGGACAACGTGACGG 214 AGGAGTGCCCGTGCGCAGCGGAGATGCCACCTTCCCCAAAGCTATGGACAACGTGACGGT Gaps 20; Length 1839; Sequence 1839 BP; 464 A; 506 C; 503 G; 366 T; 0 U; 0 Other; Score 1442.8; DB 1; Length Pred. No. 0.00056; 0; Mismatches 2; Indels Lung cancer-associated polynucleotide #312 Claim 22; Page 430-431; 453pp; English. .,0 (EOSB-) EOS BIOTECHNOLOGY INC 2001US-0339245P. 2001US-0339245P. 2001US-0350666P. 29-NOV-2001; 2001US-0334370P. 12-APR-2002; 2002US-0372246P. 18-APR-2002; 2002WO-US012476 85.9%; 98.5%; Conservative WPI; 2003-093161/08. P-PSDB; ABU56719. Murray R; Similarity WO200286443-A2. 10-MAY-2001; 09-NOV-2001; Unidentified, 13-NOV-2001; 02-APR-2003 31-OCT-2002 Best Local Simi Matches 1464; ABX76448; Query Match Aziz N, ð 셤

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itral nervous system injuries.
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Wang Z, Wehrman T, Xu C, Xue AJ,
Goodrich R, Drmanac RT;
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21-JAN-2000; 2000US-00488725.
25-APR-2000; 2000US-00552117.
20-UJN-2000; 2000US-0058042.
19-UJL-2000; 2000US-00653450.
14-SEP-2000; 2000US-00653450.
14-SEP-2000; 2000US-00653450.
19-OCT-2000; 2000US-00653450.
29-NOV-2000; 2000US-0063344.
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The invention relates to human nucleic acids (AAI57798-AAI61169) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polymuclectides are useful in gene therapy. A composition containing a polypeptide or polymuclectide or for the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral nervous cost the invention may be used to treat diseases of the peripheral nervous cost is parkinson's disease, Huntington's disease, amyotrophic localised neuropathies and central nervous system disease, amyotrophic alread sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolyty catcivity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemiss and can of the printed specification
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                                                                                                                                                             The present sequence encodes a specifically claimed novel human protein. The novel human protein can be used in therapeutic drugs for the prevention and treatment of a broad range of disorders including autoimmune and infection-related immunodeficiency, inflammatory disorders, and neurological diseases. The novel protein is expected of maving haematopoietic cell regulatory activity, tissue generation, reparation activity, activity, activithinin activity, taxis/chemotaxis activity, blood coagulation and thrombus activity, and receptor/ligand activity
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                                                                                     New polypeptides of human origin having cell regulatory, tissue generation, coagulant and other activities.
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Matches 1032; Conservative
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